Rowan Patents Preparation Bio/Chem/Pharma Features User Manual

Also available online:

Rowan Patents Core User Manual

Rowan Patents Preparation Drawing Tool User Manual

https://rowanpatents.com/drafting-user-manual/

All information in this manual is also available and evergreen in our online help library:

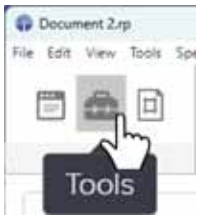
https://intercom.help/rowanpatents/en/collections/1625737

Table of Contents

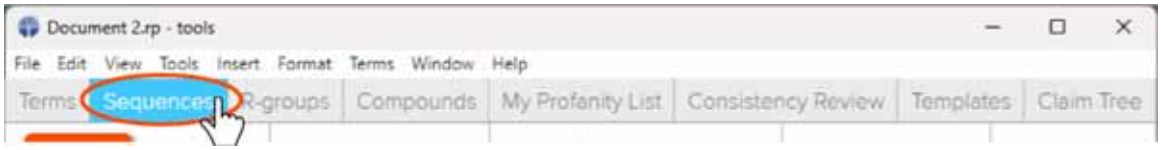
Open the Sequences Manager

Open the Sequences Manager from the Toolbar Buttons

1. Click the Tools button in the main application window toolbar or Drawing Tool toolbar.



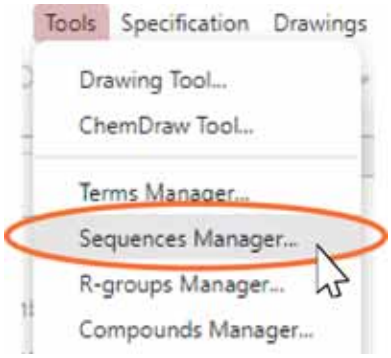
2. If necessary, click the Sequences Manager tab in the Tools window.



If you do not see the Sequences tab, you can request access.

Open the Sequences Manager from the Tools Menu

1. Click the Tools menu in any window.
2. Click the Sequences Manager option under the Tools Menu.



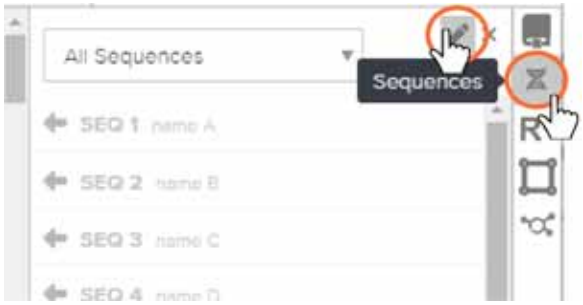
If you do not see the Sequences Manager in the Tools menu, you can request access.

Open the Sequences Manager from the Right-Hand Sidebar

1. Click the helix icon to expand the Sequences panel in the right-hand sidebar of the main application window.

   If you do not see the helix icon and Sequences panel to the right, you can request access.

2. Click the pencil icon at the top of the panel to open the Sequences Manager.

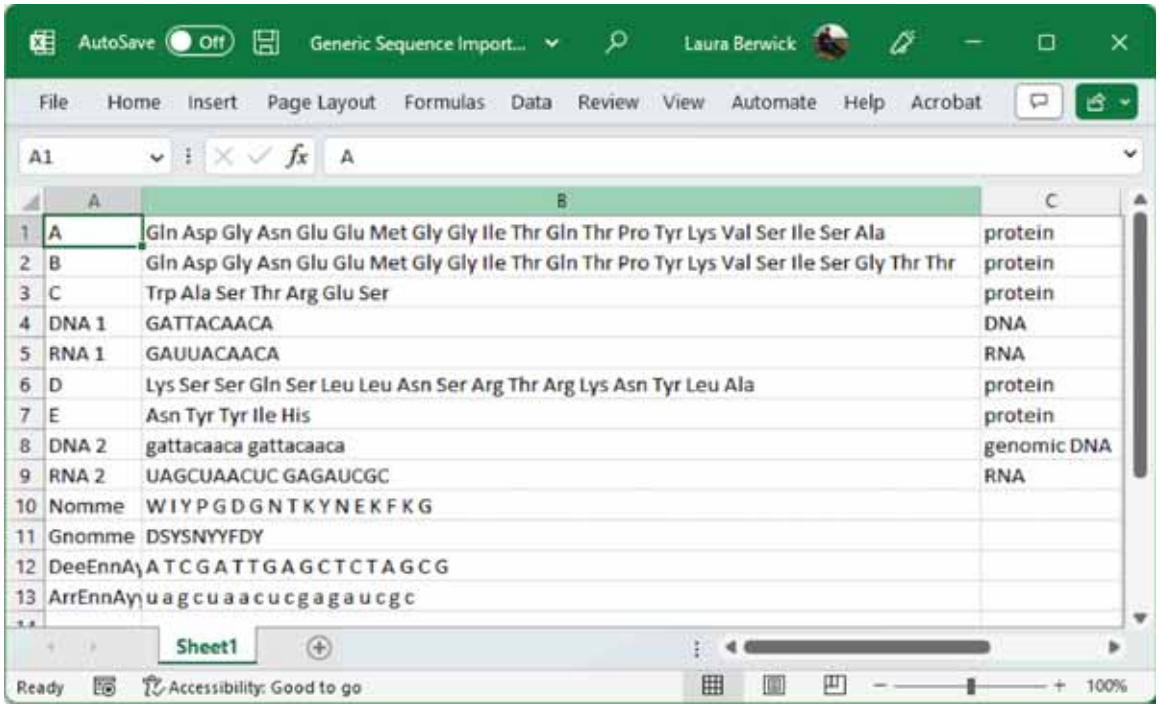


Import Large Molecule Sequences from a Spreadsheet

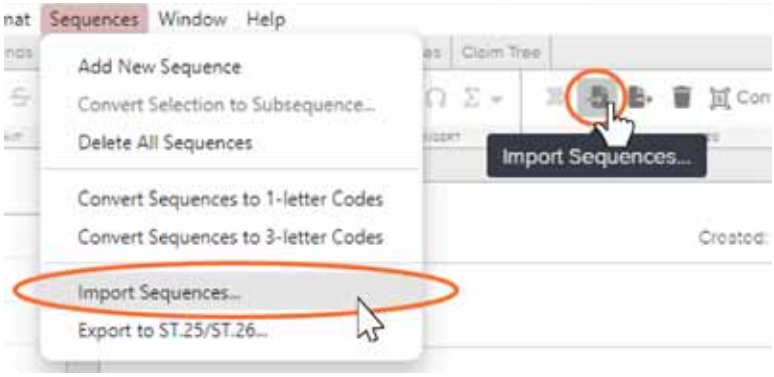
Note that sequence data can also be imported from an ST.25 formatted .txt file or a FASTA/FASTQ file.

Importing Sequences from a Spreadsheet

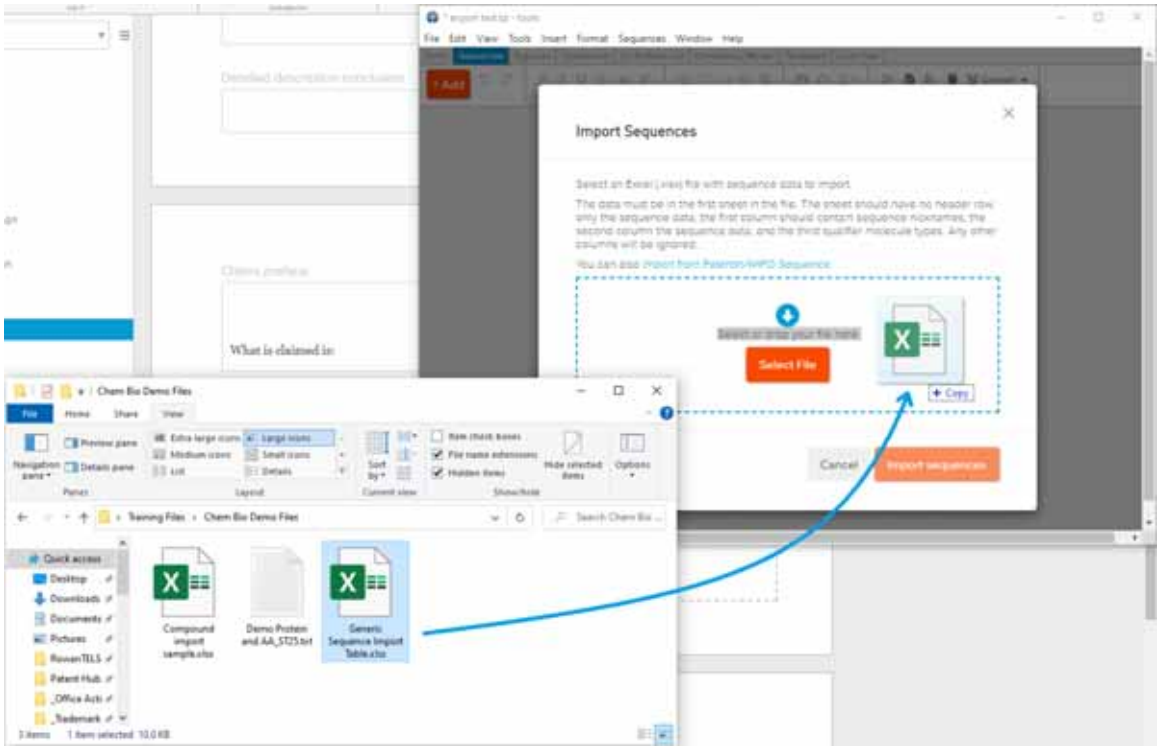
1. Collect or arrange your sequences in an .xlsx spreadsheet, with short, memorable names in the first column, the sequence contents in the second column, and qualifier molecule types in the third column.



2. Open the Sequences Manager.
3. Click the Import Sequences control in the toolbar or select the option from the Sequences menu.

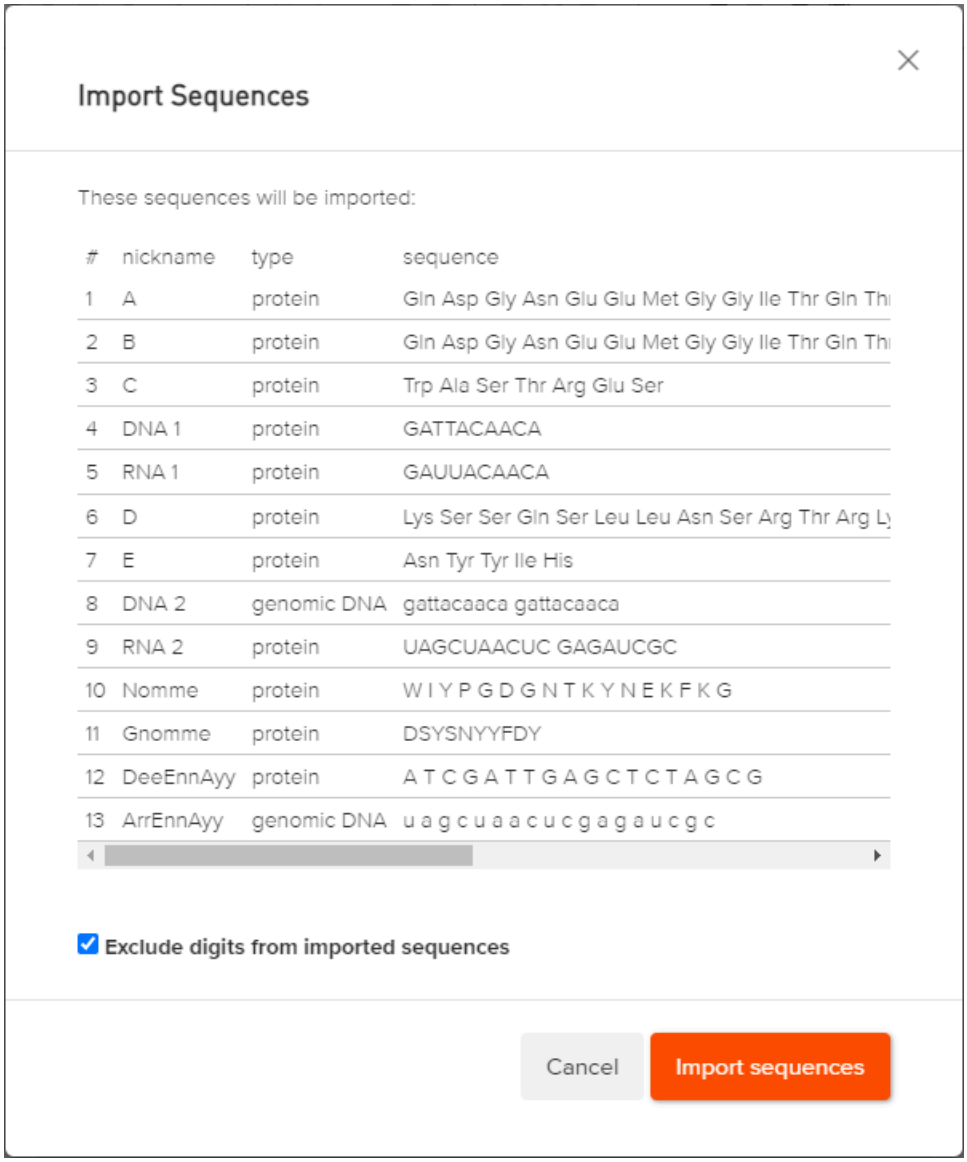


4. Drag your sequence spreadsheet onto the resulting import dialog



OR use the Select File button to browse your file system for your spreadsheet file.

5. Review your imported data in the preview provided.



6. Uncheck the Exclude digits option to allow numeric symbols in sequence descriptions.
7. Click the Import sequences button if the data meets your needs.

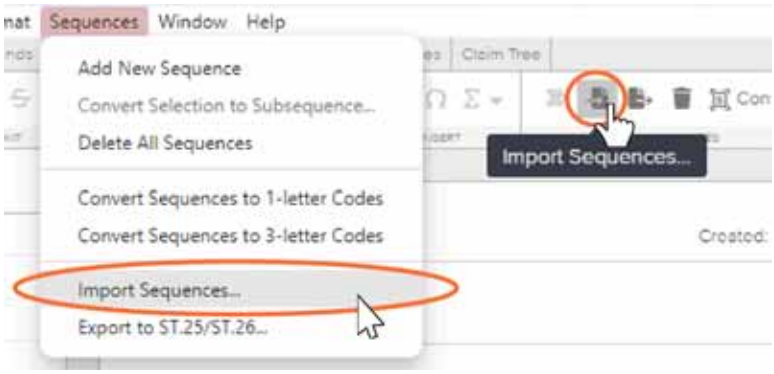
   Numbering is automatically assigned for use in SEQ ID NO labels. Sequences can be reordered in the Sequences Manager to adjust numbering as desired.

Import Large Molecule Sequences from a PatentIn/WIPO ST.25 Text Sequence Listing

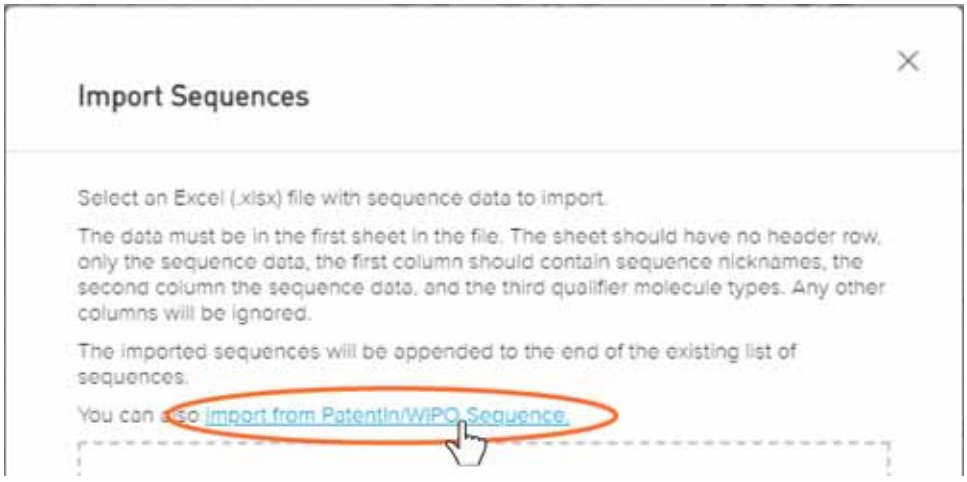
Note that sequence data can also be imported from an Excel spreadsheet or a FASTA/FASTQ file.

Importing Sequences from an ST.25 Text Sequence Listing

1. Open the Sequences Manager.
2. Click the Import Sequences control in the toolbar or select the option from the Sequences menu.

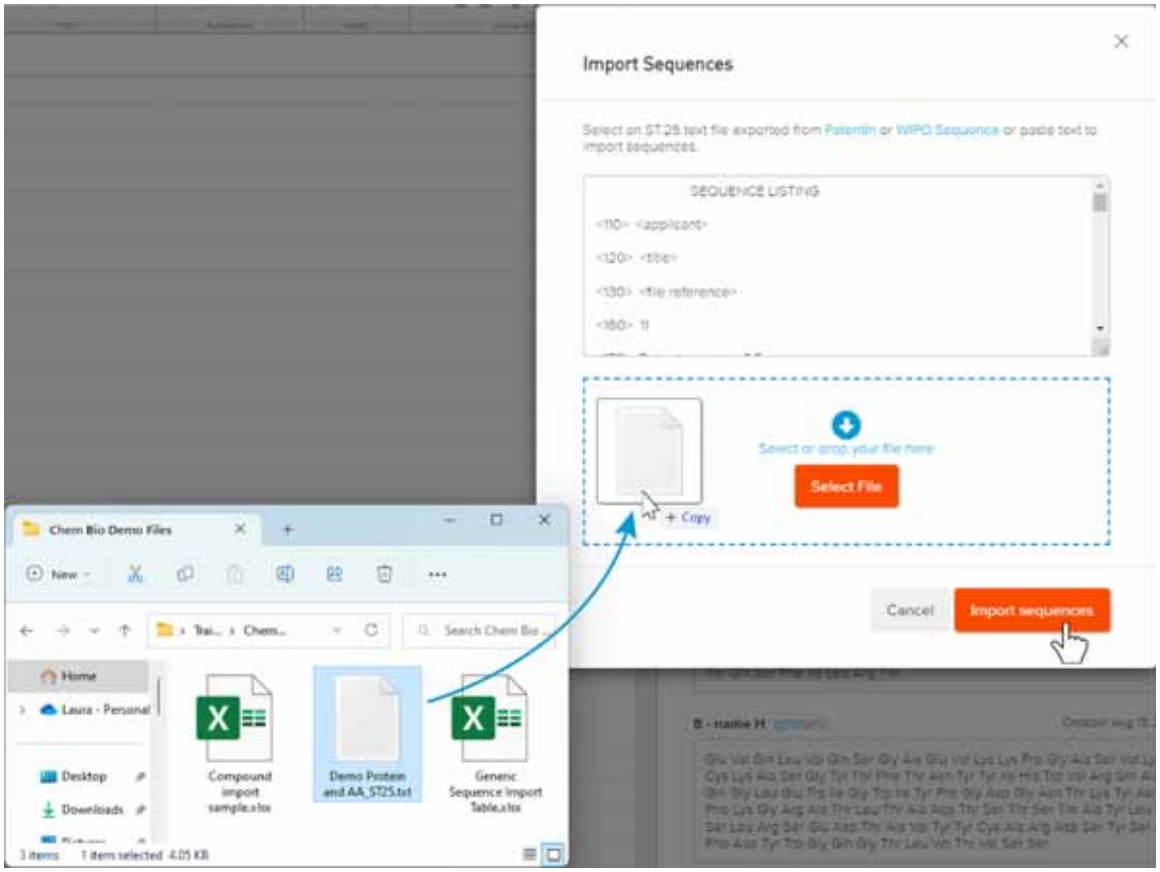


3. Select the "import from PatentIn/WIPO Sequence" option.



4. Paste text into the top field, drag and drop your ST.25-formatted .txt file into the dialog provided, or use the Select File button to browse your file system for your

ST.25-formatted .txt file.



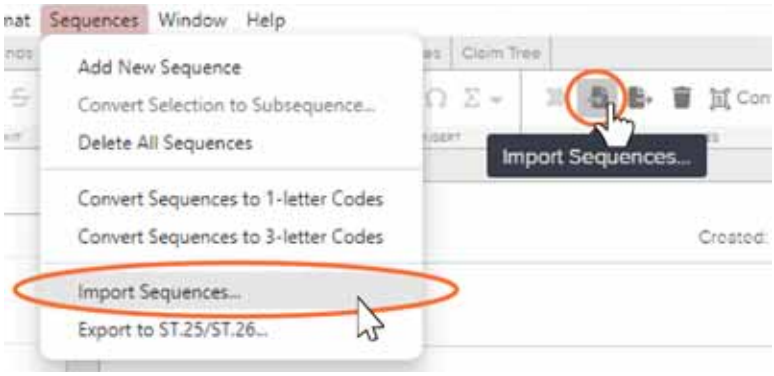
5. Click the Import Sequences button.

   Numbering is automatically assigned for use in SEQ ID NO labels. Sequences can be reordered in the Sequences Manager to adjust numbering as desired.

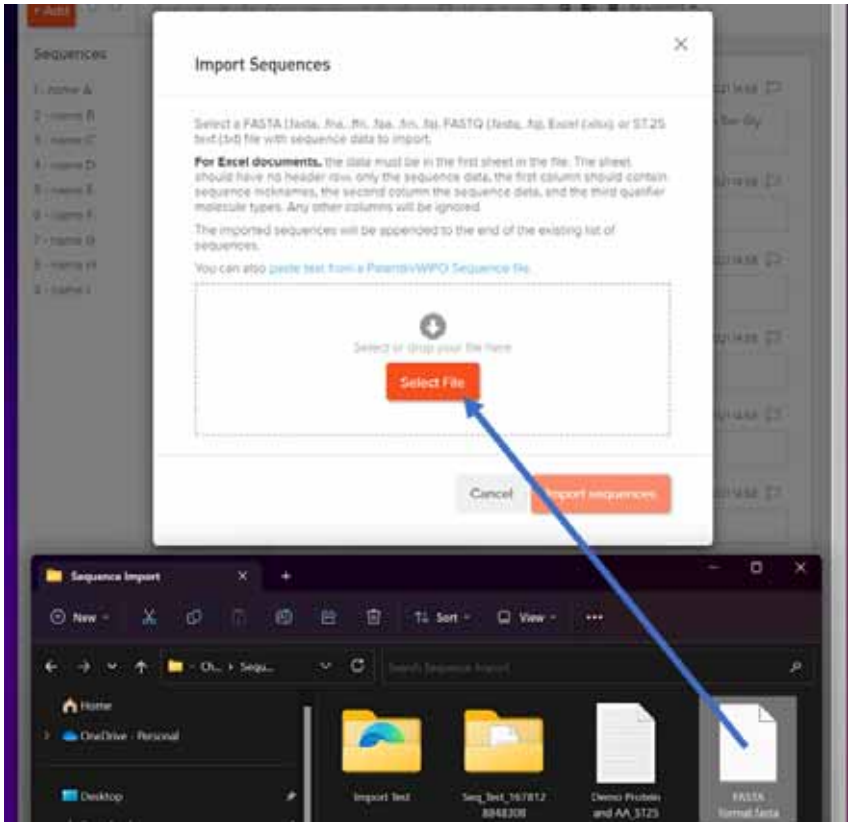
Import Large Molecule Sequences from a FASTA/FASTQ File

Note that sequence data can also be imported from an Excel spreadsheet or an ST.25 formatted .txt file.

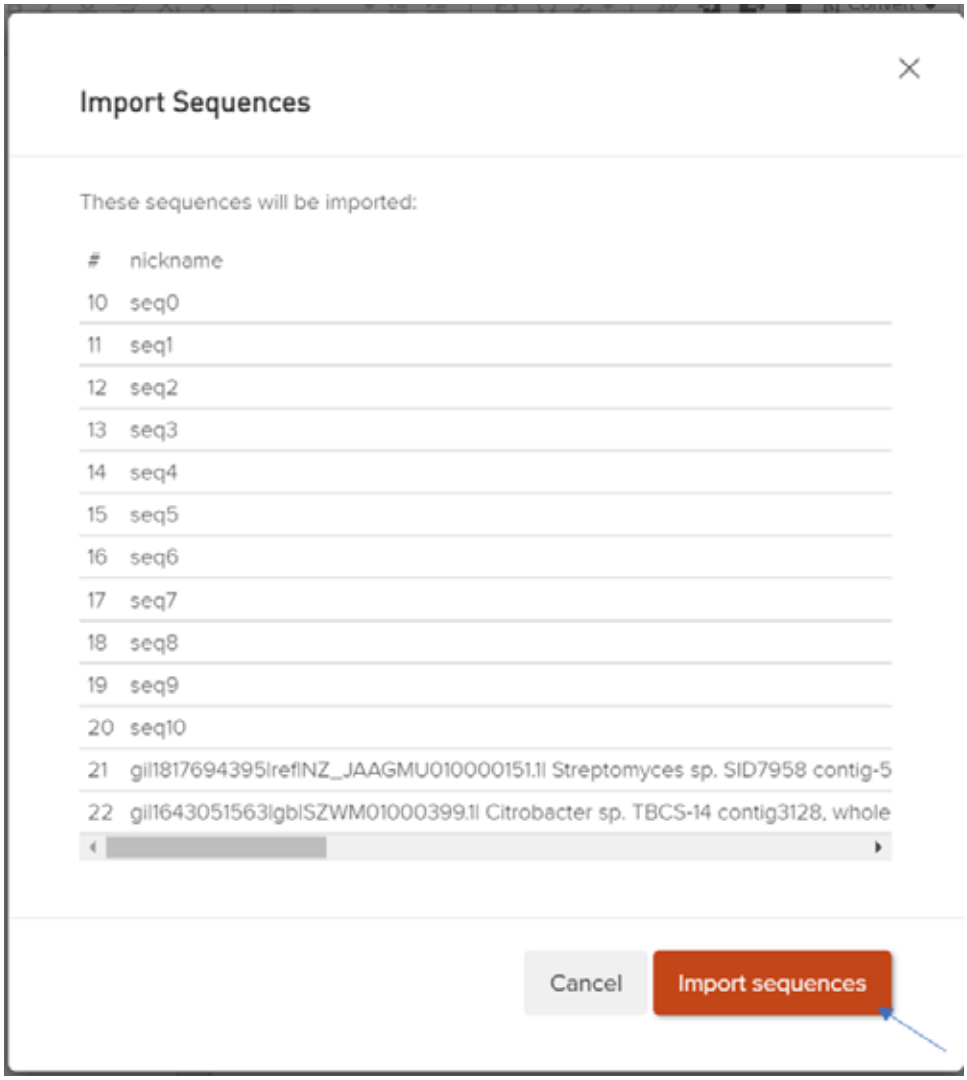
1. Open the Sequences Manager.
2. Click the Import Sequences control in the toolbar or select the option from the Sequences menu.



3. Drag and drop your .fasta, .fastq, or other similarly-formatted file into the dialog provided, or use the Select File button to browse your file system for your formatted file.



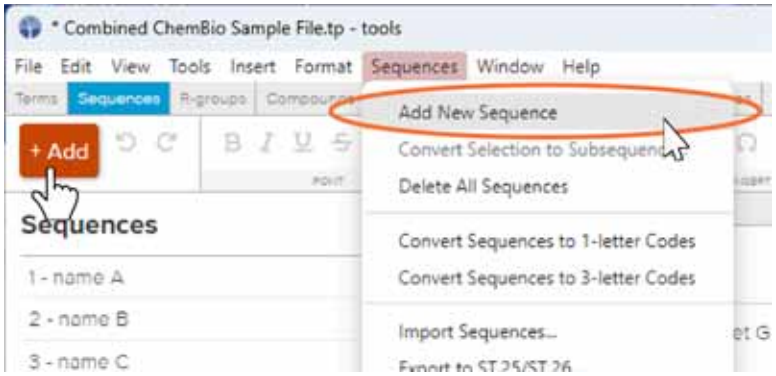
4. Click the Import Sequences button.



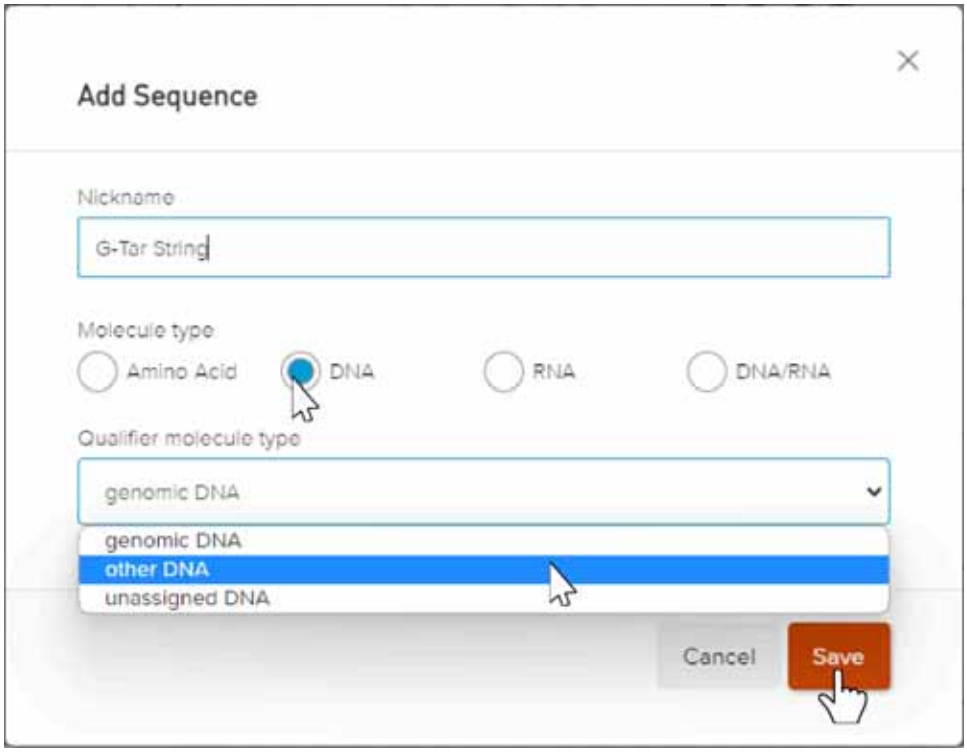
Numbering is automatically assigned for use in SEQ ID NO labels. Sequences can be reordered in the Sequences Manager to adjust numbering as desired.

Create an Individual Large Molecule Sequence

1. Open the Sequences Manager.
2. Click the Add button or select Add New Sequence from the Sequences menu.



3. Enter a Nickname as a memorable way to reference the sequence for your convenience, or as a secondary signifier for the sequence in your application.

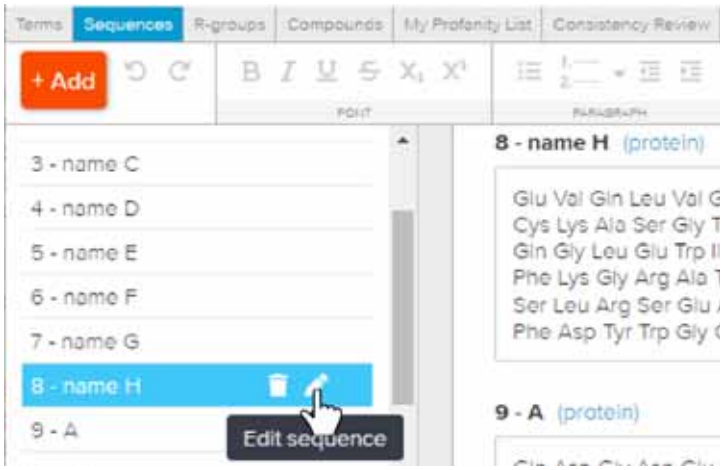


4. Select a molecule type and qualifier molecule type from the options provided.
5. Click the Save button.

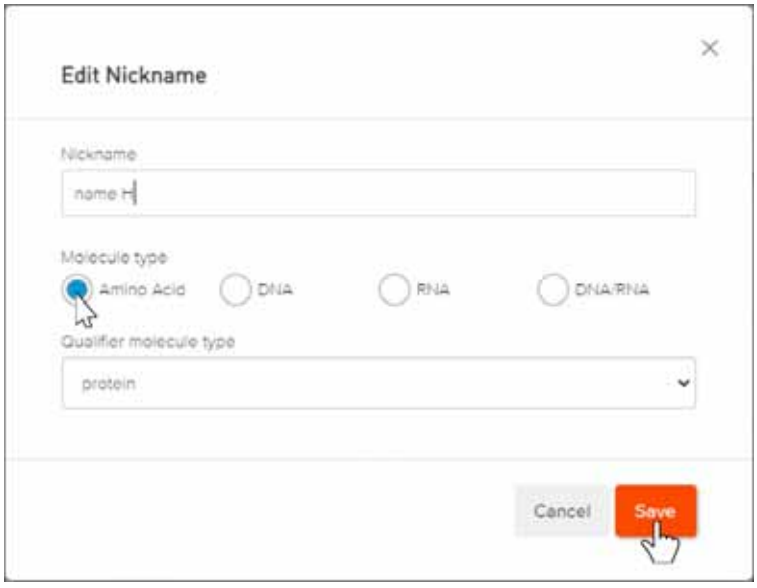
Edit a Large Molecule Sequence

1. Open the Sequences Manager.
2. Locate the entry for the desired sequence in the left-hand sidebar listing.

3. Hover over the sequence entry and click the edit pencil icon that appears on hover.



4. Make the desired changes in the dialog presented.

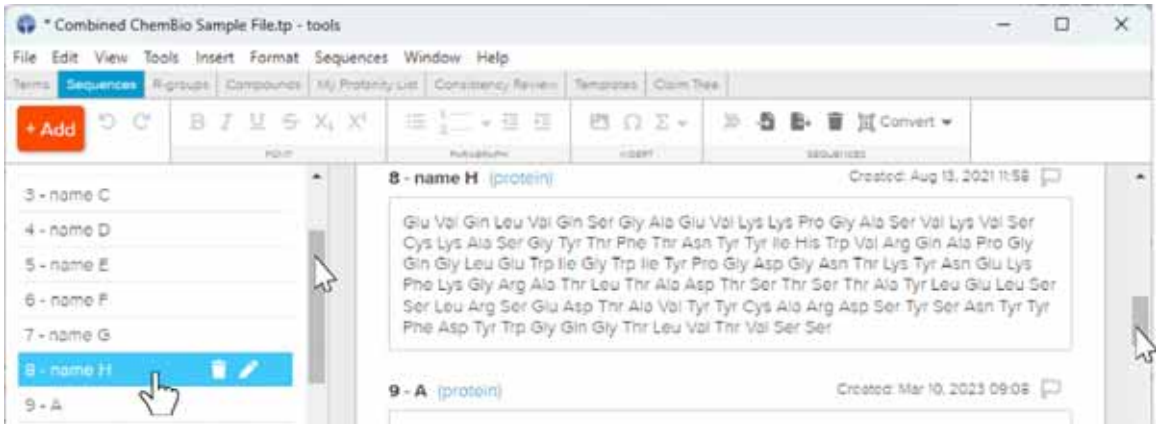


5. Click the Save button.
6. For sequence composition changes, see Describe a Large Molecule Sequence.

Describe a Large Molecule Sequence

1. Open the Sequences Manager.
2. Locate and click the entry for the desired sequence in the left-hand sidebar

listing

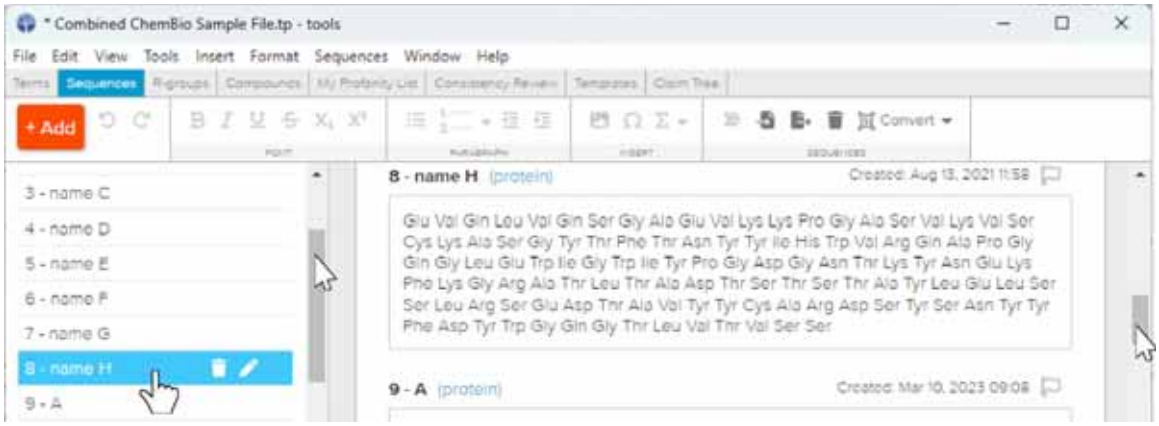


OR scroll down the window to the description field for the desired sequence.

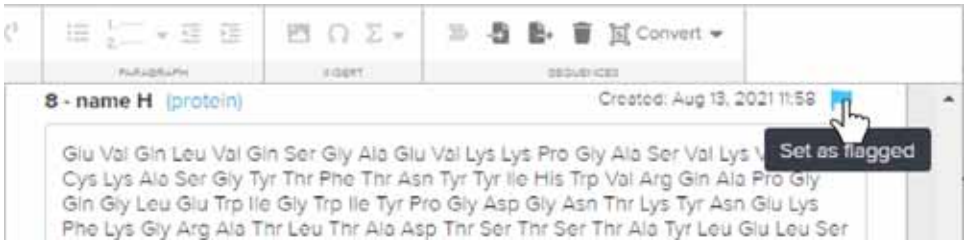
3. Type or paste the new or updated composition description of the sequence composition into the description field provided.
4. If necessary, convert the description coding from 3 letters to 1 letter or vice versa.

Flag Key Sequences

1. Open the Sequences Manager.
2. Locate and click the entry for the desired sequence in the left-hand sidebar listing or scroll down the window to the description field for the desired sequence.



3. Click the flag icon to the upper right of the sequence description field.

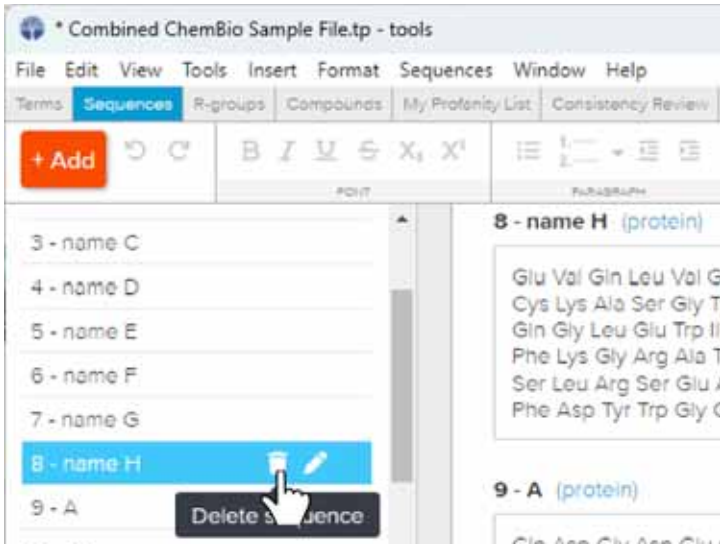


Note that flagging is only visible within the Rowan Patents integrated drafting environment. None of the data exported for filing will indicate which sequences have been flagged.

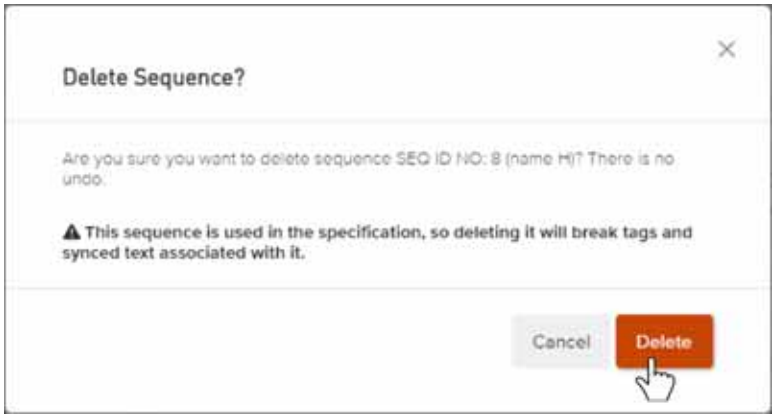
4. To unflag a flagged sequence, click the flag icon again.

Delete a Large Molecule Sequence

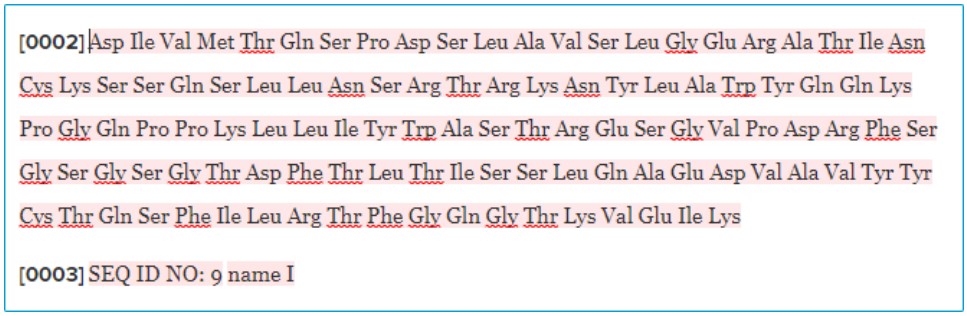
1. Open the Sequences Manager.
2. Locate the entry for the desired sequence in the left-hand sidebar list.
3. Hover over the sequence entry and click the trashbin icon that appears on hover.



4. Confirm your deletion.



5. Text previously tagged as sequence data will be highlighted in your application to facilitate making the appropriate updates as you desire.



Insert Sequence Data into an Application

Insertion from the Right-Hand Sidebar

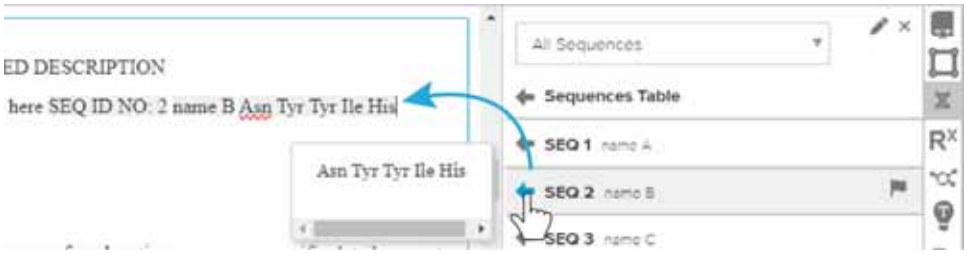
1. Make sure your cursor is at the desired insertion point in your claims or specification.
2. Click the helix icon to expand the Sequences panel in the right-hand sidebar.

If you do not see the helix icon in the right-hand sidebar, you can request access.

3. Click the SEQ # to insert the sequence identifier label as a tagged data object.

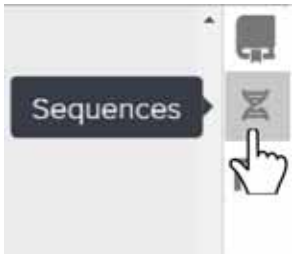
4. Click the nickname to insert the sequence nickname as a tagged data object.

5. Click the Insert Sequence arrow to insert the full sequence composition as an auto-synchronized data object.



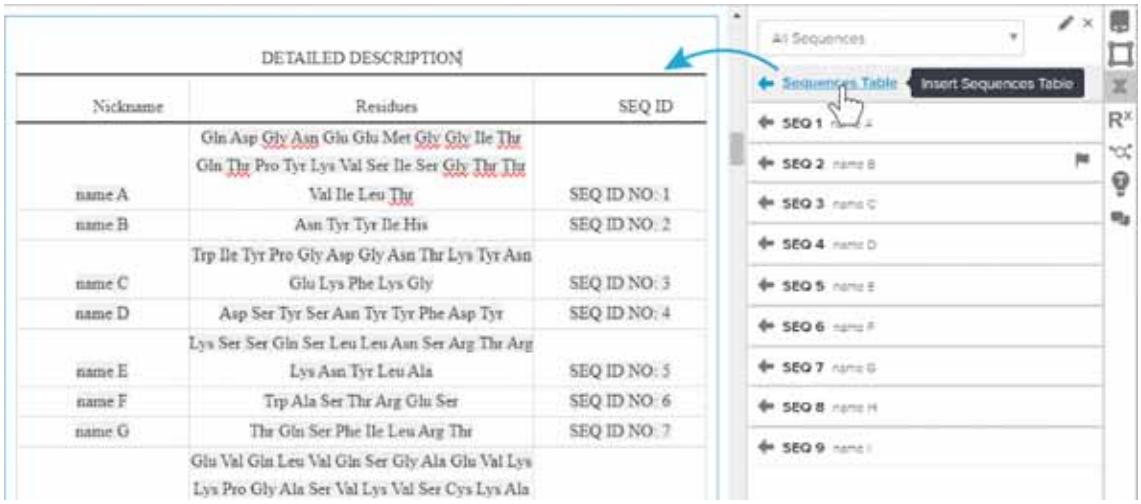
Include a Sequence Table

1. Make sure your cursor is at the desired insertion point in your claims or specification.
2. Click the helix icon to expand the Sequencess panel in the right-hand sidebar.



If you do not see the helix icon in the right-hand sidebar, you can request access.

3. Click the Sequences Table option to insert the sequences table at your cursor location.
4. A table containing populated columns with the name, residues, and SEQ ID # for each sequence will be inserted at your cursor location.



Note that we recommend you only insert this table after you've ensured your compounds are ordered and described as desired. But if you need to make changes after you've inserted the table, it's easy to delete and reinsert it.

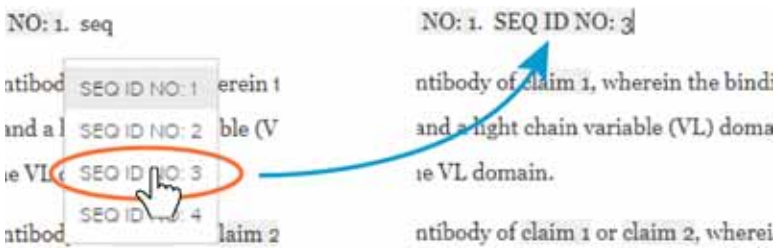
SEQ ID NO Autocompletion as You Type

1. Type "seq#", where # is the identifying number for the existing sequence you wish to reference, followed by a space.

   E.g., to insert the "SEQ ID NO: 1", type "seq1" and hit space. The typed "seq1" text will be replaced by the tagged "SEQ ID NO: 1" data object.

OR begin typing the desired sequence identifier.

2. Select from among the sequence identifiers in the auto-complete menu presented

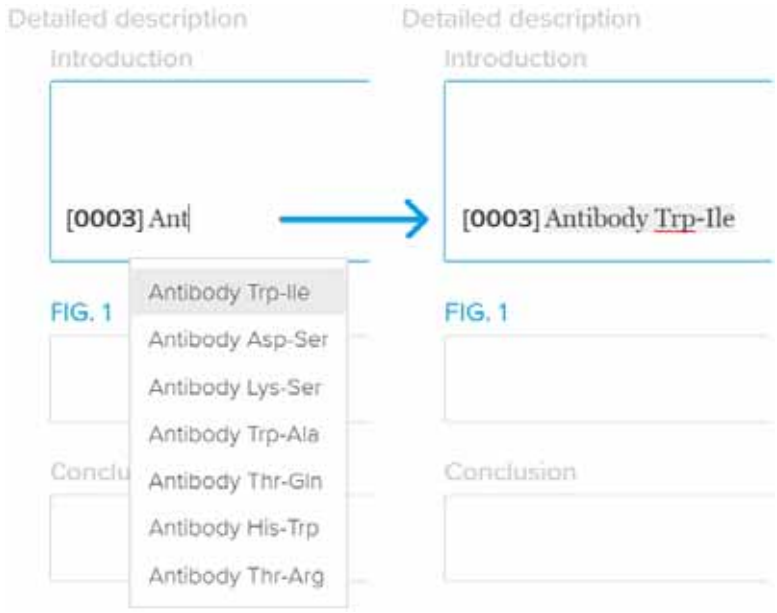


OR when you type the space following "seq", the text will be replaced by "SEQ ID NO: ", and you may type the desired number followed by another space.

3. The selected identifier will be inserted as a tagged data object.

Nickname Autocompletion as You Type

1. Begin typing the desired nickname.
2. Select from among the matching nicknames in the auto-complete menu presented



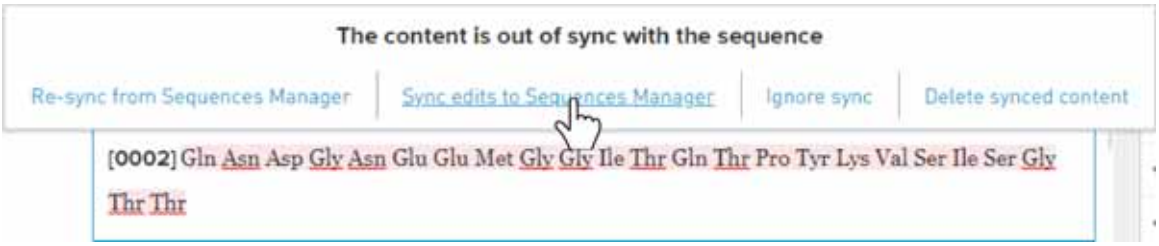
OR finish typing the nickname and hit space.

3. The nickname will be inserted as a tagged data object.

Sequence Revision Data Synching

Note that all changes made using the Sequences Manager are automatically reflected across your entire application.

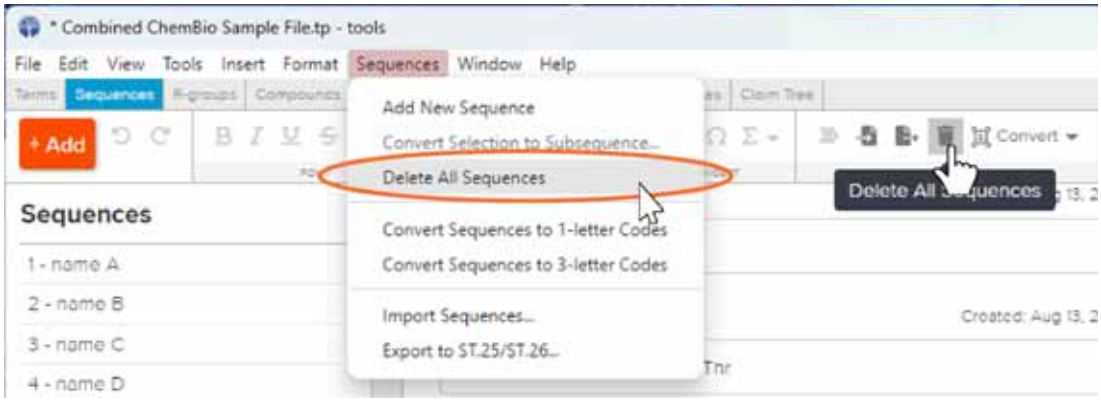
1. If you type a change to the auto-synced sequence composition data in your application, the data will be highlighted as out of sync with the Sequences Manager data.



2. The menu provided while your cursor is within the auto-synced text will allow you to:
    - Re-Sync from the Sequences Manager, undoing your change
    - Sync edits to the Sequences Manager, storing your updates and reflecting them across your application
    - Leave the text as is and ignore synchronization going forward, untagging your text, or
    - Delete the synced text, removing your text altogether.

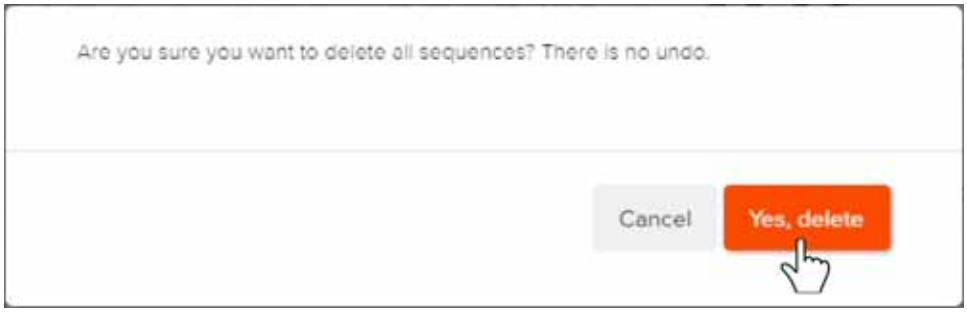
Remove All Sequences

1. Open the Sequences Manager.
2. Select the Delete All Sequences option from the toolbar or the Sequences menu.

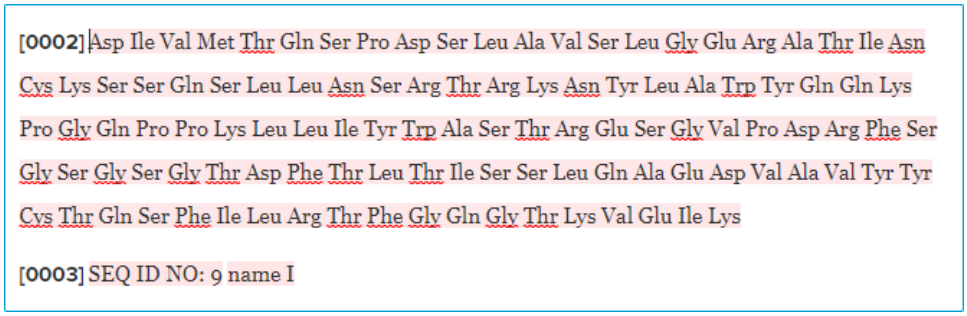


Note that this deletes data object tagging and data, but does not remove the tagged text from your application.

3. Confirm your deletion in the confirmation dialog.



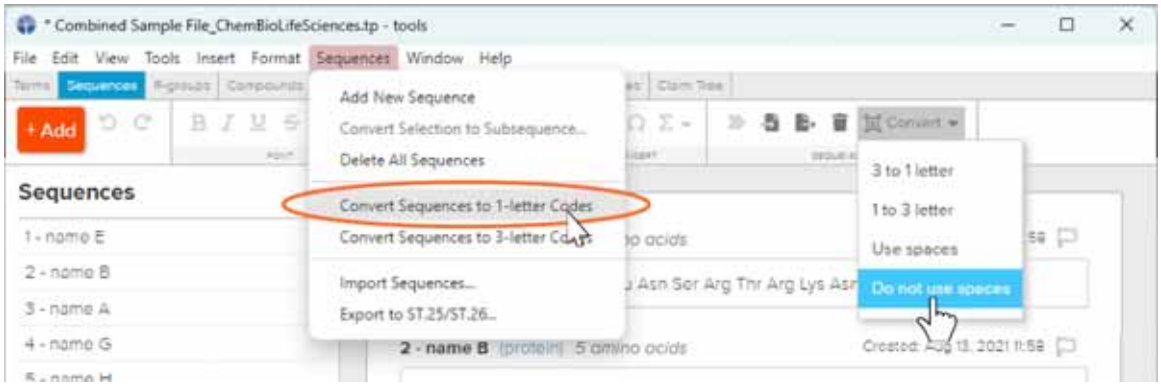
4. Text previously tagged as sequence data will be highlighted in your application to facilitate making the appropriate updates as you desire.



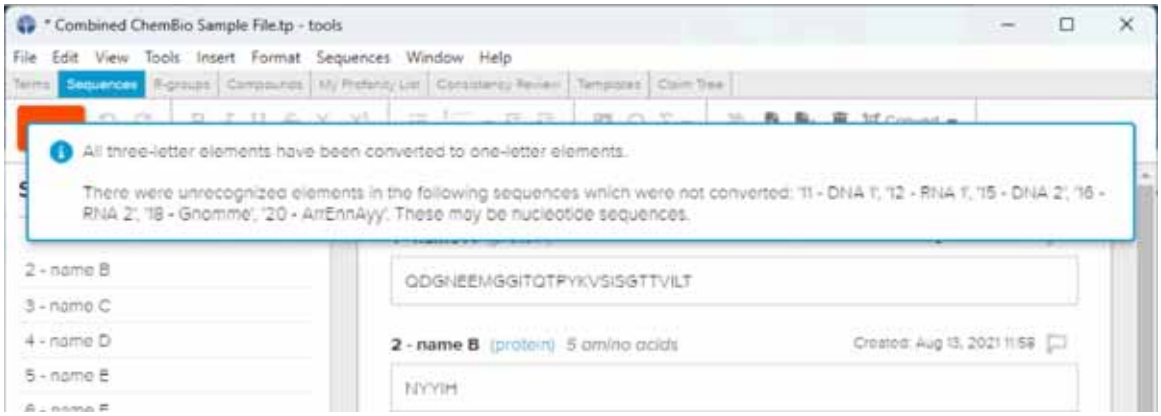
Set Sequence Format

1. Open the Sequences Manager.
2. Choose the desired conversion option (3 to 1 letter or 1 to 3 letter) from the toolbar or the Sequences menu.

3. Choose the desired spacing option (Use or Do not use spaces) from the toolbar menu.

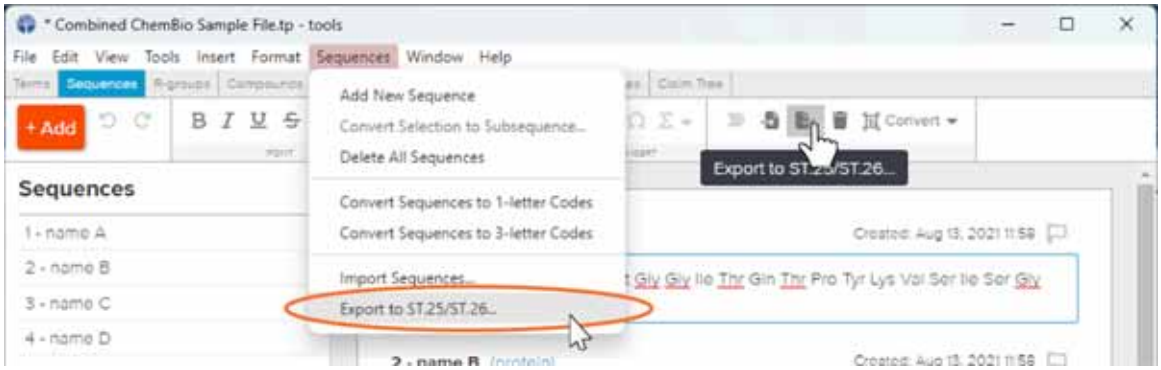


4. Your sequence coding will be converted per your selections. Sequences that cannot be converted will remain unchanged, and a notification will indicate which sequences weren't converted.



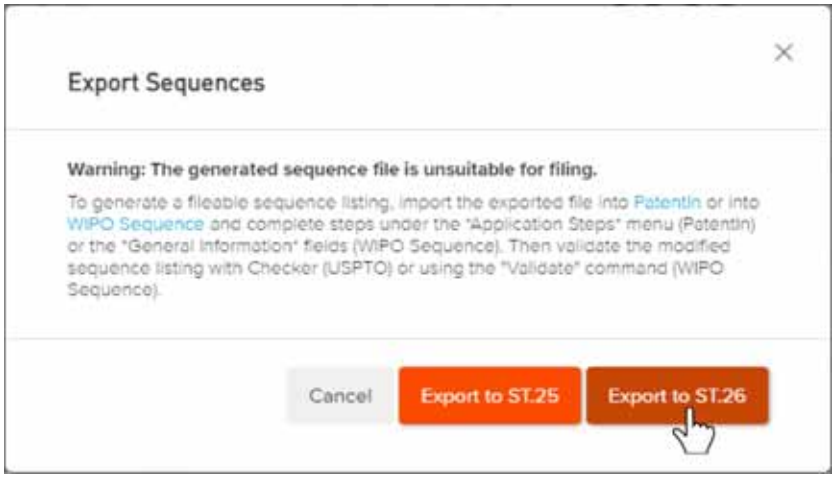
Export a Sequence Listing

1. Open the Sequences Manager.
2. Click the Export to ST.25/ST.26 option in the toolbar or under the Sequences menu.

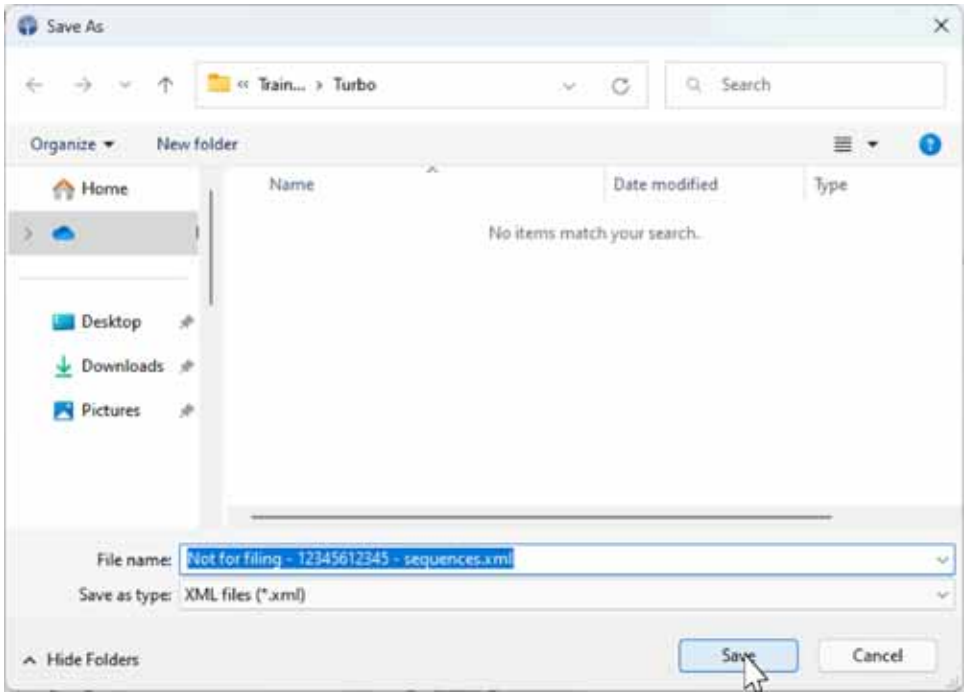


Note that if a sequence description contains data that cannot be exported correctly, you will receive a message listing which sequences need attention.

3. Select which format to export to.



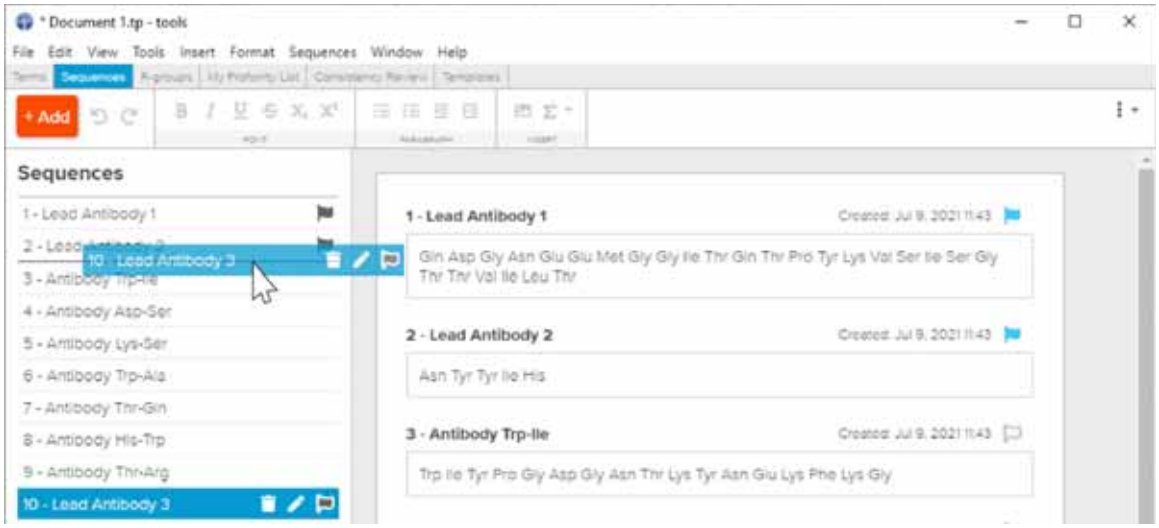
4. Save your file to your file system using your operating system dialogs.



Warning: The generated sequence file is unsuitable for filing. Import your Rowan export file into PatentIn or WIPO Sequence to complete and validate your sequence listing.

Reorder Sequences

1. Open the Sequences Manager.
2. Locate the entry for the desired sequence in the left-hand sidebar list.
3. Click and drag that entry up or down the list, and drop it into the desired new position, as indicated by the darker insertion point bar.



4. Your entire sequence list will be renumbered to reflect your changes, and all SEQ ID NO references will be updated throughout your application.

Create a Subsequence from a Sequence

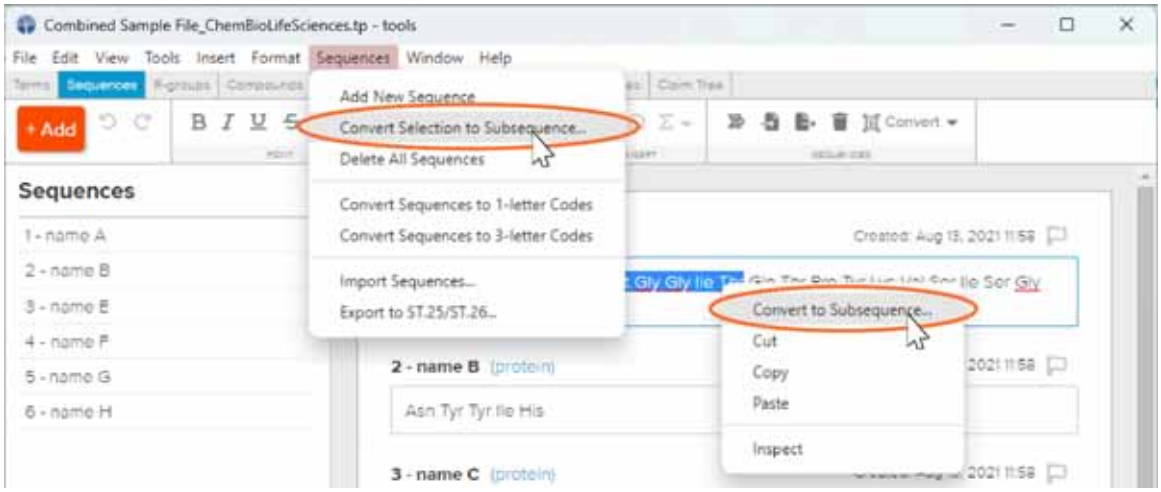
Identifying a Subsequence

1. Open the Sequences Manager
2. Locate and click the entry for the desired sequence in the left-hand sidebar listing

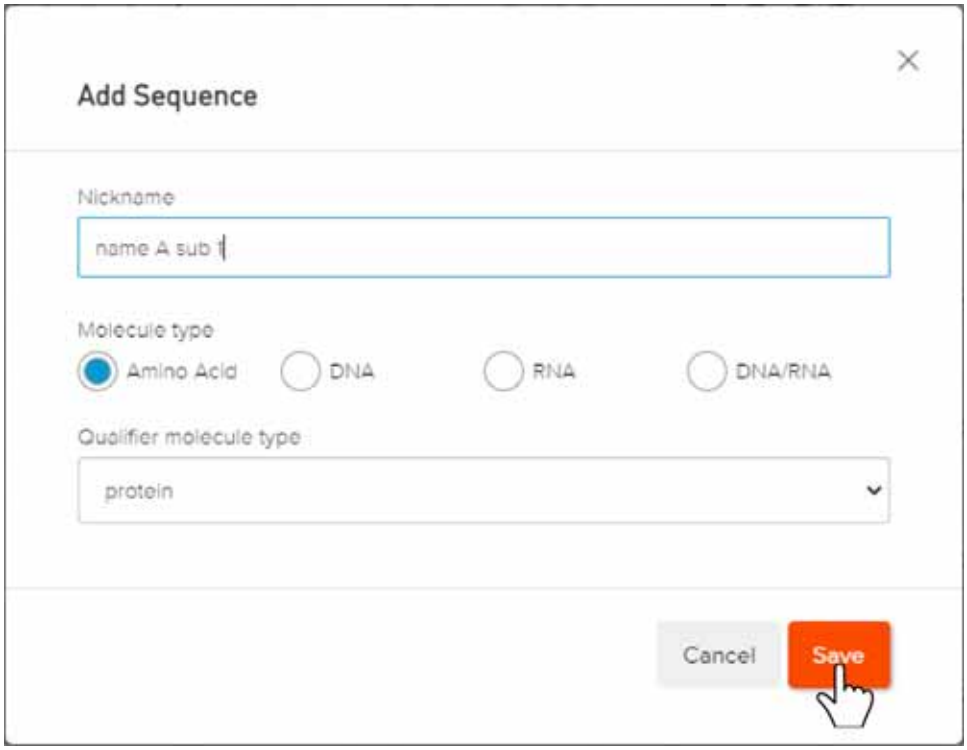
   OR scroll down the window to the description field for the desired sequence.

3. Select the elements of that sequence you wish to identify as a separate subsequence.
4. Right+click the selected text and select the Convert to Subsequence option.

   OR select the Convert Selection to Subsequence... option in the Sequences menu.

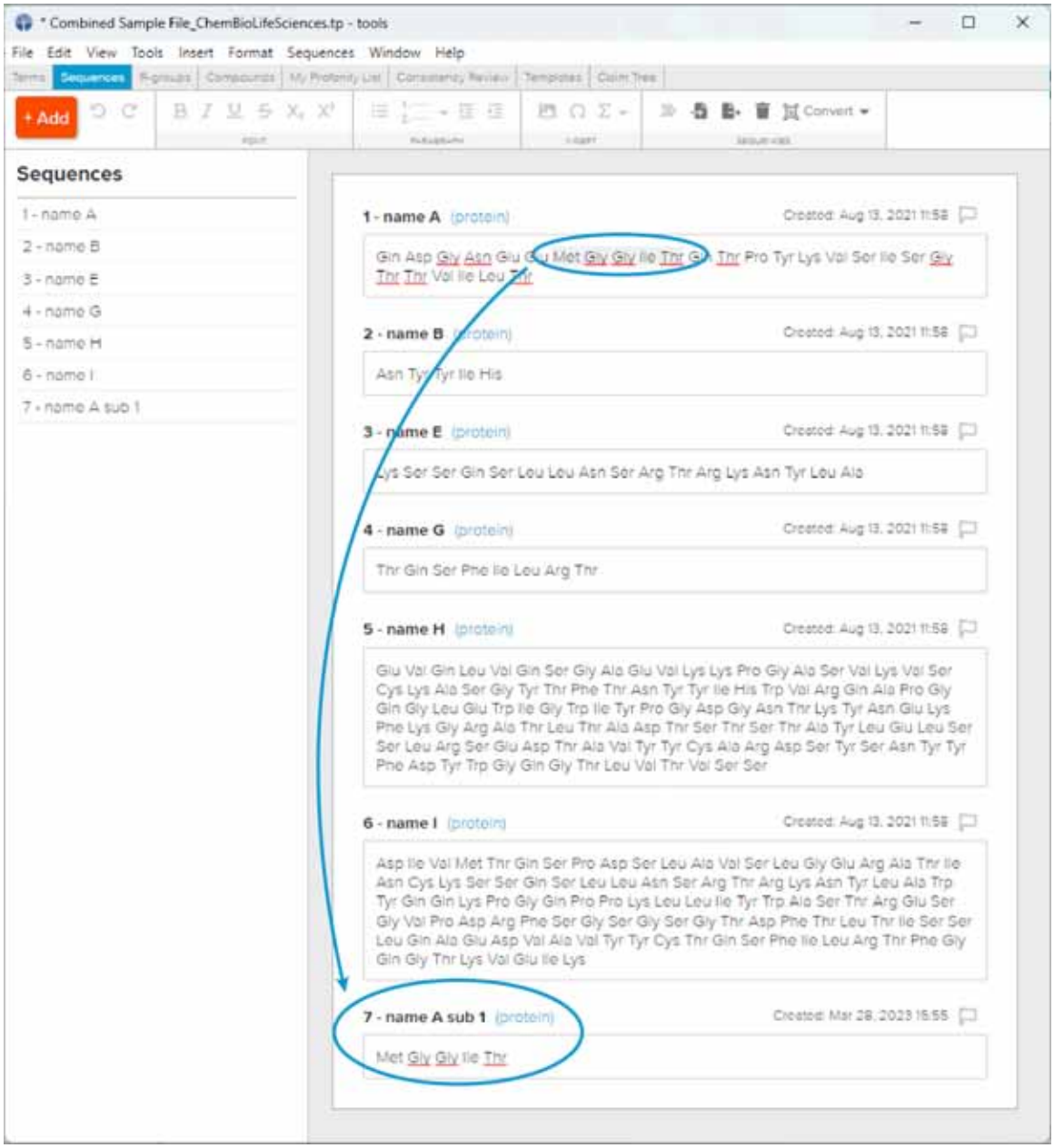


5. Fill in the data as desired in the Add dialog.



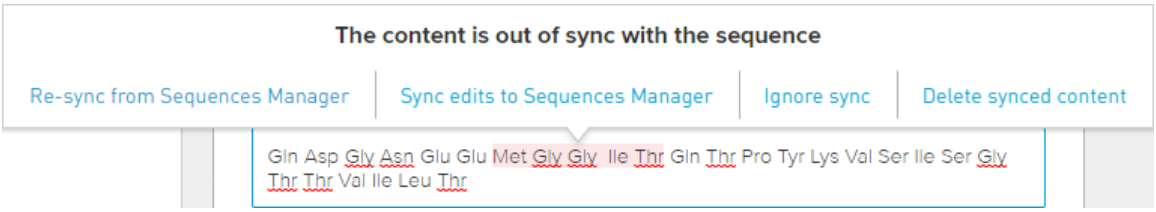
Note that molecule and qualifier molecule type information will be inherited from the original sequence, but can be modified if desired.

6. Click the Save button.
7. A new sequence listing and identifier will be created for the identified subsequence.



Synchronizing Changes

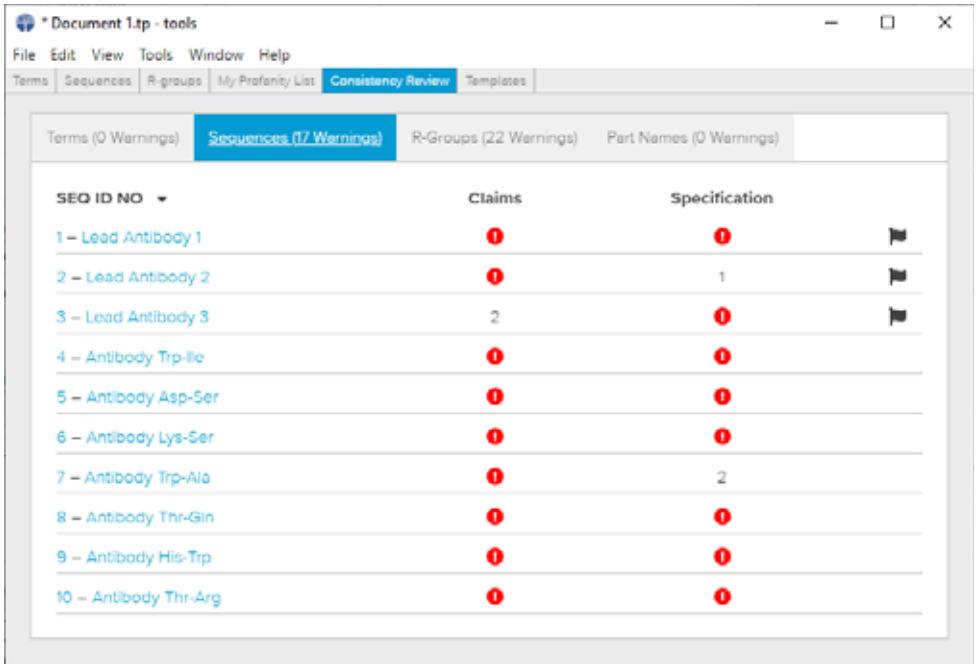
1. The subsequence will be tagged as a synched data object in the original sequence. Changes to the subsequence will be reflected in the parent sequence automatically.
2. Changes made in the sequence that affect the subsequence will present a dialog of synchronization options:



- Re-Sync from the Sequences Manager, undoing your change
- Sync edits to the Sequences Manager, storing your updates and reflecting them in the subsequence and across your application
- Leave the text as is and ignore synchronization going forward, decoupling the subsequence from the parent sequence, or
- Delete the synced text, removing the subsequence data entirely from the parent sequence.

Check Sequence Support with Consistency Review

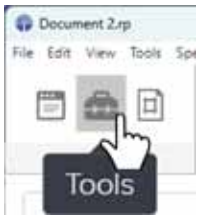
1. Open the Consistency Review tool from the Tools menu or the Review menu.
2. Select the Sequences tab.
3. Review the warnings for data that is not included in your claims and specification, and correct your application by inserting sequence data into your claims and specification as needed.



Open the Compounds Manager

Open the Compounds Manager from the Toolbar Buttons

1. Click the Tools button in the main application window toolbar or Drawing Tool toolbar.

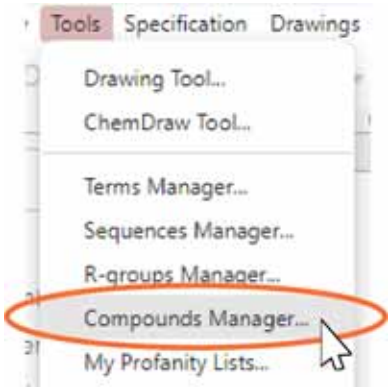


2. If necessary, click the Compounds Manager tab in the Tools window.

If you do not see the Compounds tab, you can request access.

Open the Compounds Manager from the Tools Menu

1. Click the Tools menu in any window.
2. Click the Compounds Manager option under the Tools Menu.



If you do not see the Compounds Manager in the Tools menu, you can request

access.

Open the Compounds Manager from the Right-Hand Sidebar

1. Click the molecule icon to expand the Compounds panel in the right-hand sidebar of the main application window.

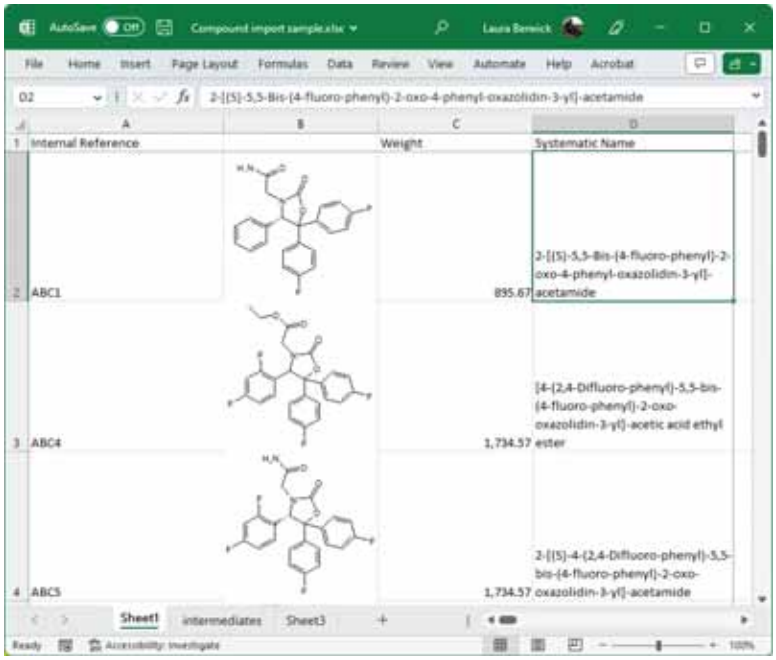
   If you do not see the molecule icon and Compounds panel to the right, you can request access.

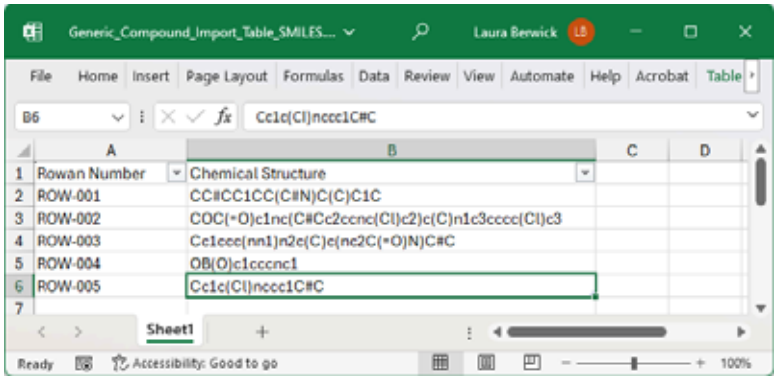
2. Click the pencil icon at the top of the panel to open the Compounds Manager.

Import Small Molecule Compounds from a Spreadsheet

Importing Compounds from a Spreadsheet

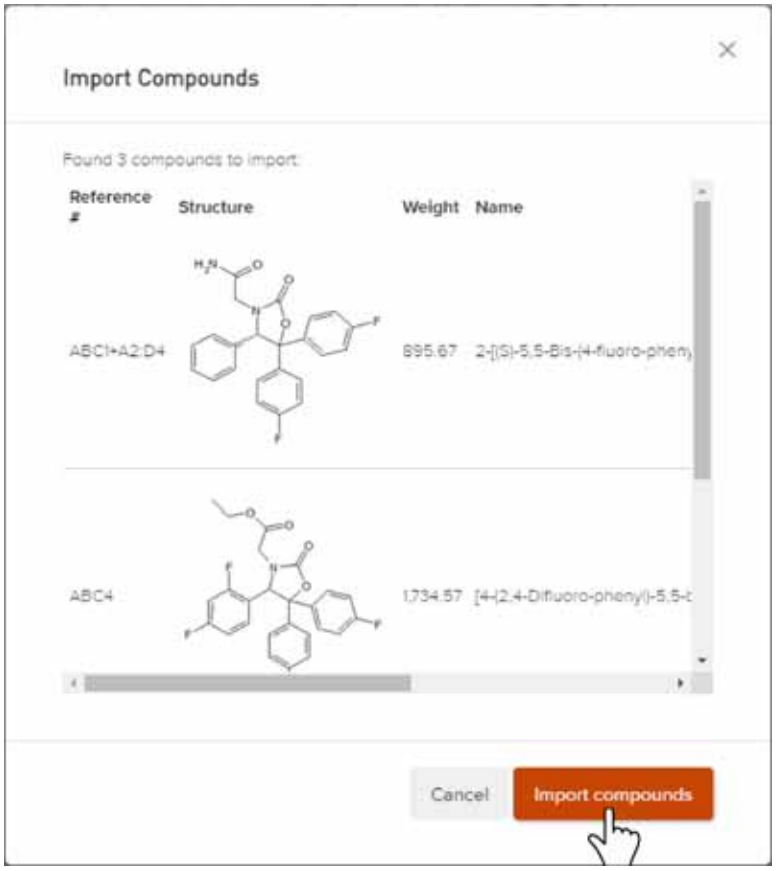
1. Collect or arrange your compounds in an .xlsx spreadsheet with:
   - Your internal compound reference number in the first column (required)
   - The molecular drawing image or SMILES code in the second column (required)
   - The compound weight in the third column (optional)
   - The systematic name in the fourth column (optional)





2. Open the Compounds Manager.
3. Click the Import Compounds control in the toolbar or select the option from the Compounds menu.

4. Select and copy the desired data in your spreadsheet.
5. Paste your copied data into the Import Compounds dialog.



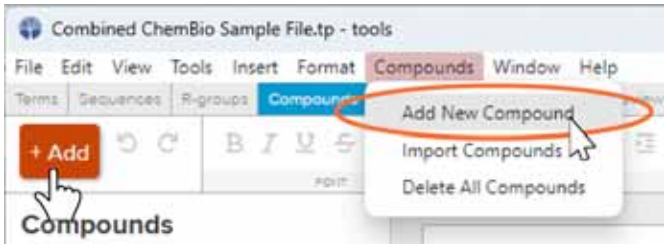
Note that any copied and pasted columns beyond the first four will be ignored.

6. Review your pasted data.
7. Click the Import Compounds button if the data meets your needs.
8. Numbering is automatically assigned for use in Compound or Example labels. Compounds can be reordered in the Compound Manager to adjust numbering as desired.

Create an Individual Small Molecule Compound

Creating a Compound

1. Open the Compounds Manager.
2. Click the Add button or select Add New Compound from the Compounds menu.

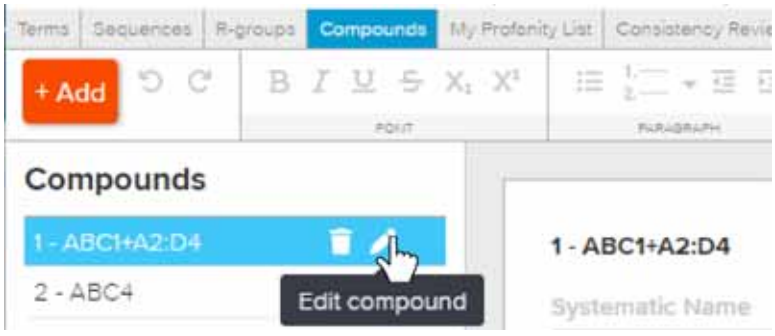


3. Enter your internal reference ID.

4. Click the Save button.

Edit a Small Molecule Compound

1. Open the Compound Manager.
2. Locate the entry for the desired compound in the left-hand sidebar listing.
3. Hover over the compound entry and click the edit pencil icon that appears on hover.

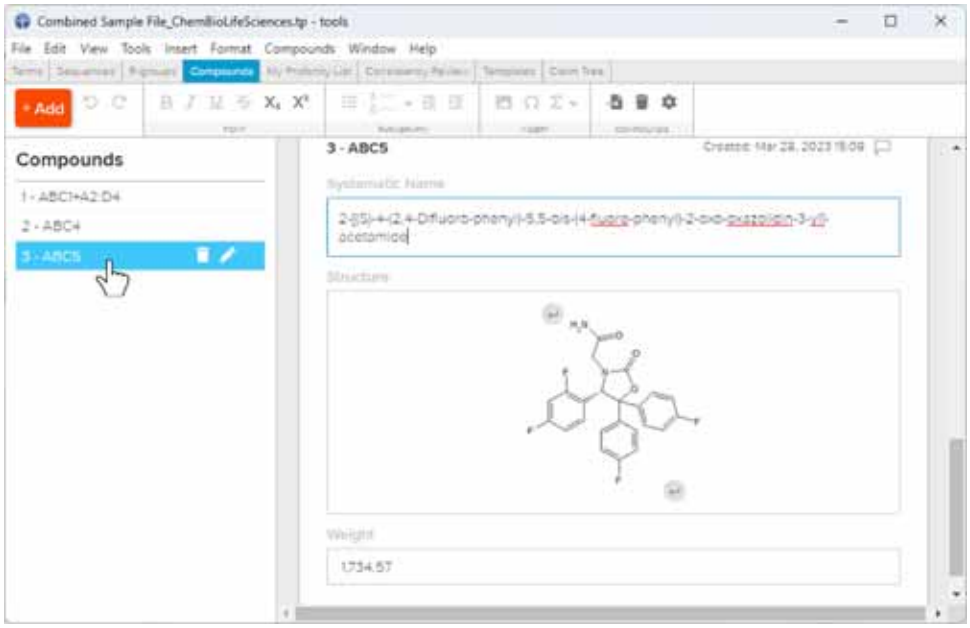


4. Make the desired changes in the dialog presented.

5. Click the save button.
6. For other compound changes, see Describe a Compound.

Describe a Compound

1. Open the Compound Manager.
2. Locate and click the entry for the desired compound in the left-hand sidebar listing or scroll down the window to the description fields for the desired compound.
3. Enter the desired systemic name, structure, and weight in the fields provided.



Flag Key Compounds

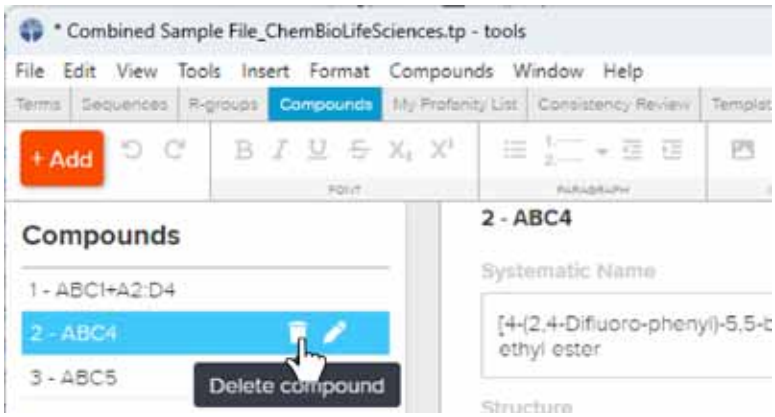
1. Open the Compounds Manager.
2. Locate and click the entry for the desired compound in the left-hand sidebar listing or scroll down the window to the description fields for the desired compound.
3. Click the flag icon to the upper right of the compound description fields.

Note that flagging is only visible within the Rowan Patents integrated drafting environment. None of the data exported for filing will indicate which compounds have been flagged.

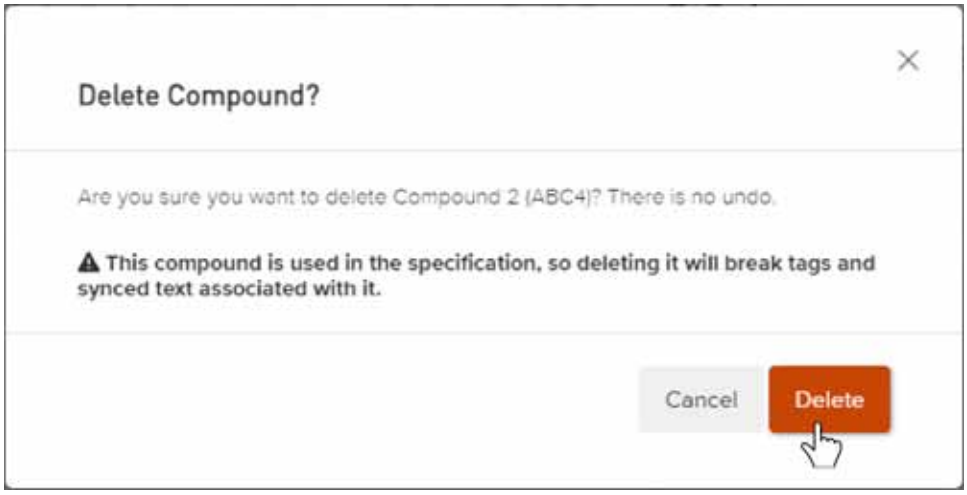
4. To unflag a flagged compound, click the flag icon again.

Delete a Compound

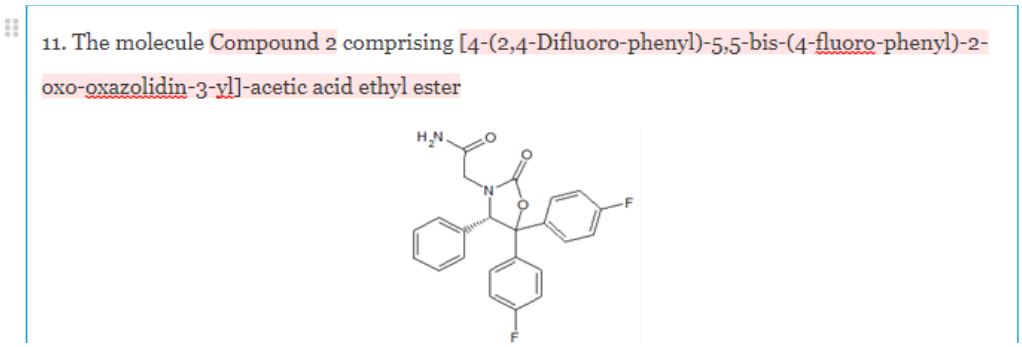
1. Open the Compounds Manager.
2. Locate the entry for the desired compound in the left-hand sidebar list.
3. Hover over the compound entry and click the trashbin icon that appears on hover.



4. Confirm your deletion.



5. Text previously tagged as compound data will be highlighted in your application to facilitate making the appropriate updates as you desire.



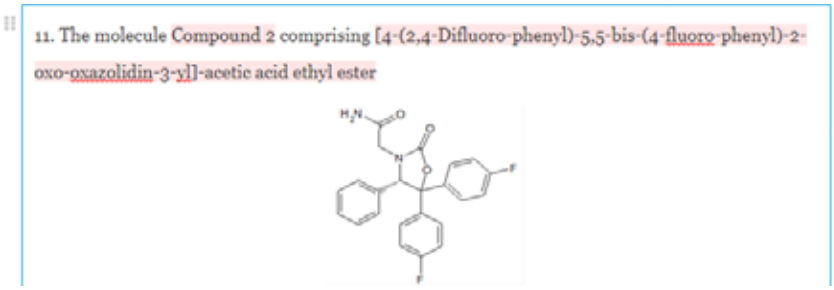
Remove All Compounds

1. Open the Compound Manager.
2. Select the Delete All Compounds option from the toolbar or the Compounds menu.

Note that this deletes data object tagging and data, but does not remove the tagged text from your application.

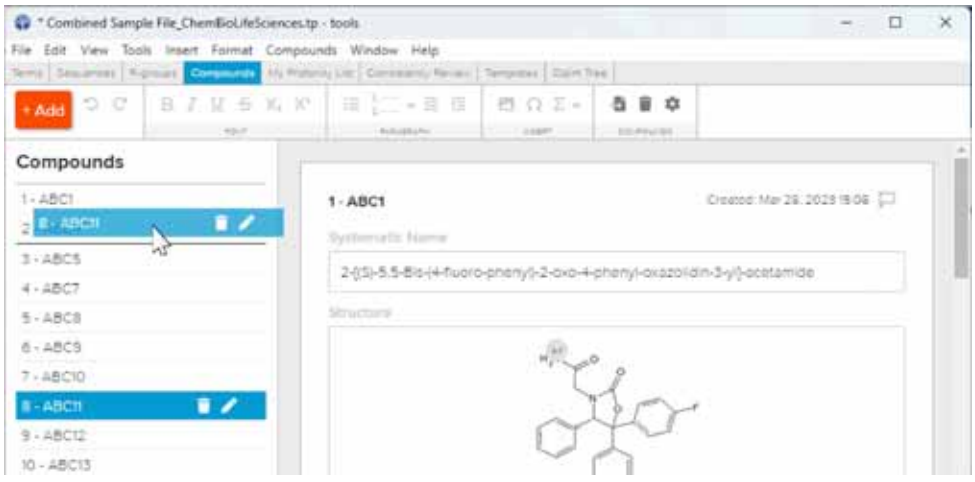
3. Confirm your deletion in the confirmation dialog

4. Text previously tagged as compound data will be highlighted in your application to facilitate making the appropriate updates as you desire.



Reorder Compounds

1. Open the Compounds Manager.
2. Locate the entry for the desired compound in the left-hand sidebar list.
3. Click and drag that entry up or down the list, and drop it into the desired new position, as indicated by the darker insertion point bar.

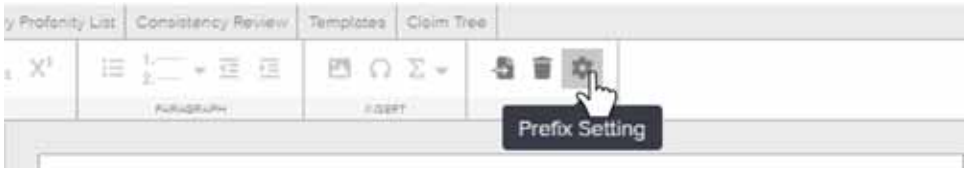


4. Your entire compound list will be renumbered to reflect your changes, and all

Compound/Example references will be updated throughout your application.

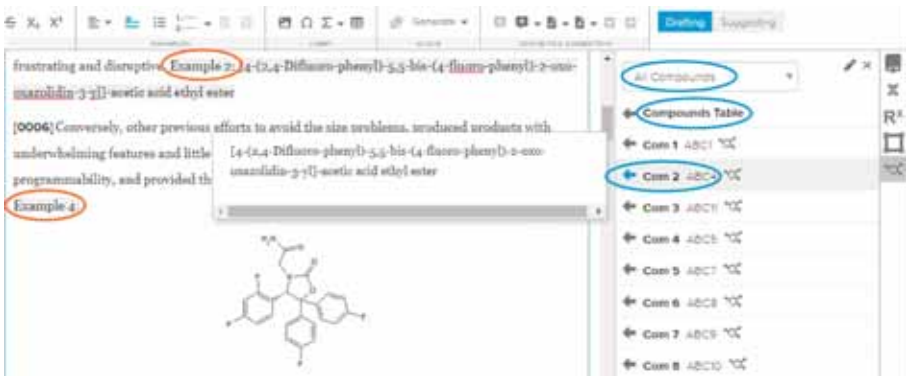
Change Prefix from "Compound" to "Example"

1. Open the Compounds Manager.
2. Click the Prefix Setting icon.



3. Select your desired prefix.

4. Click the Save button.
5. Tagged reference identifiers will be updated to reflect your selection throughout the application.

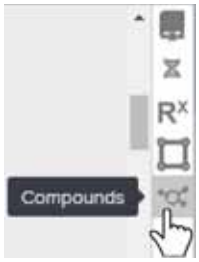


Note that the user interface will continue to show "Com" and "Compound" options, but your application text will be updated throughout as appropriate when you select the "Example" option.

Insert Compound Information into an Application

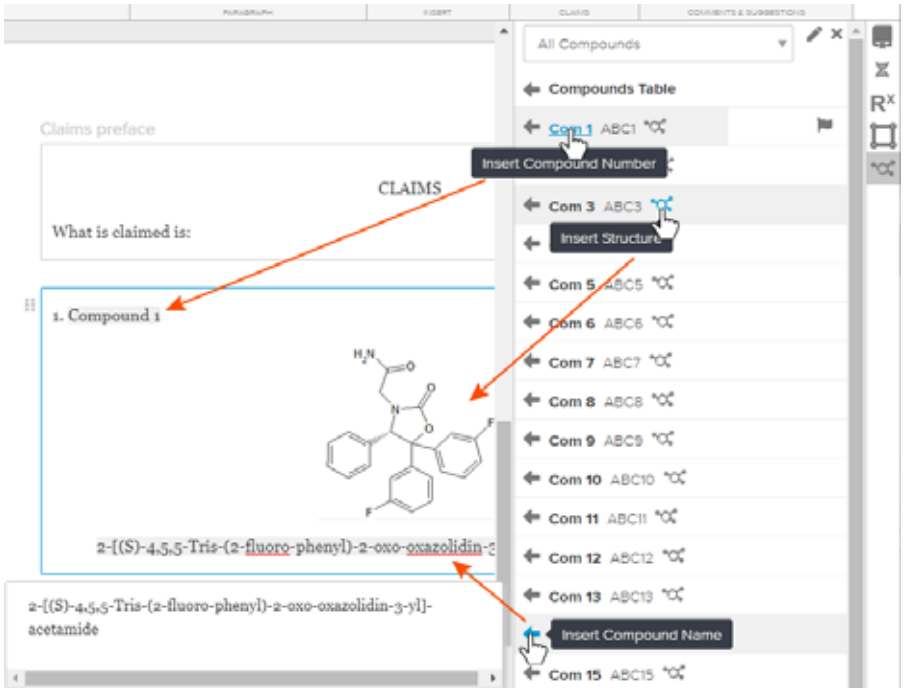
Insertion from the Right-Hand Sidebar

1. Make sure your cursor is at the desired insertion point in your claims or specification.
2. Click the molecule icon to expand the Compounds panel in the right-hand sidebar.



If you do not see the molecule icon in the right-hand sidebar, you can request access.

3. Click the Com # to insert the Compound/Example identifier label as a tagged data object.
4. Click the molecule icon to insert the structure image as a tagged data object.
5. Click the arrow to insert the systematic name as a tagged data object.

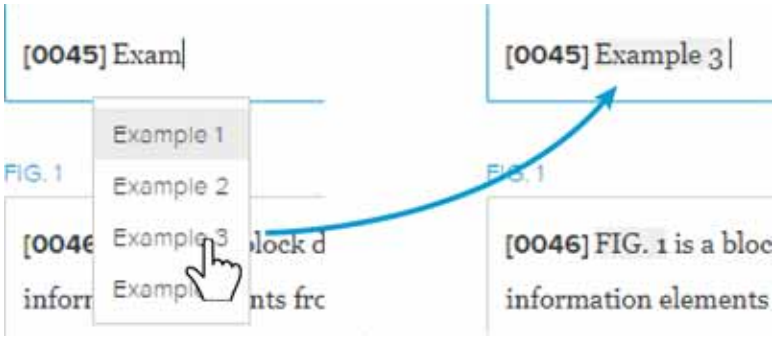


Note that your internal reference ID is displayed in the right-hand sidebar panel for your information, but is not intended for insertion into your application.

6. Changes made in the Compounds Manager will be automatically reflected in inserted data across your application.

Compound/Example Autocompletion as You Type

1. Begin typing the desired Compound/Example identifier.
2. Click to select from among the identifiers in the auto-complete menu presented, or press enter to select the highlighted option.

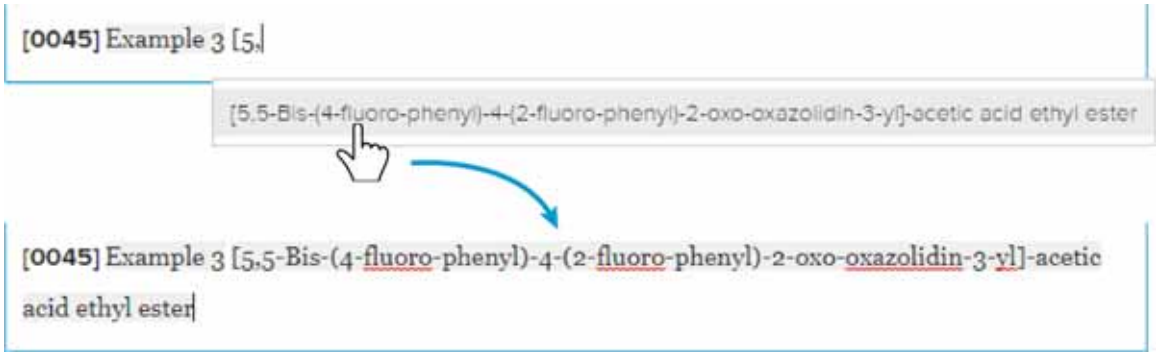


OR when you type the space following your compound/example number, the typed identifier will be tagged as a data object.

3. Changes made in the Compounds Manager will be automatically reflected in inserted data across your application.

Systematic Name Autocompletion as You Type

1. Begin typing the desired Compound/Example identifier.
2. Click to select from among the systematic names in the auto-complete menu presented, or press enter to select the highlighted option.



OR when you type the space following your systematic name, that typed text will be tagged as a data object.

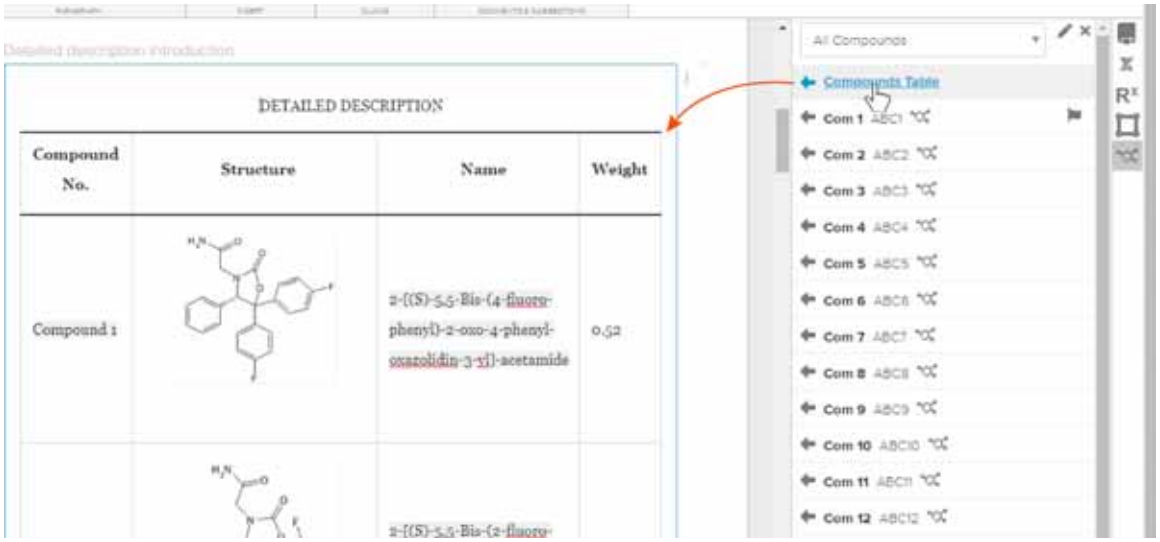
3. Changes made in the Compounds Manager will be automatically reflected in inserted data across your application.

Include a Compound/Example Table

1. Make sure your cursor is at the desired insertion point in your claims or specification.
2. Click the molecule icon to expand the Compounds panel in the right-hand sidebar.

If you do not see the molecule icon in the right-hand sidebar, you can request access.

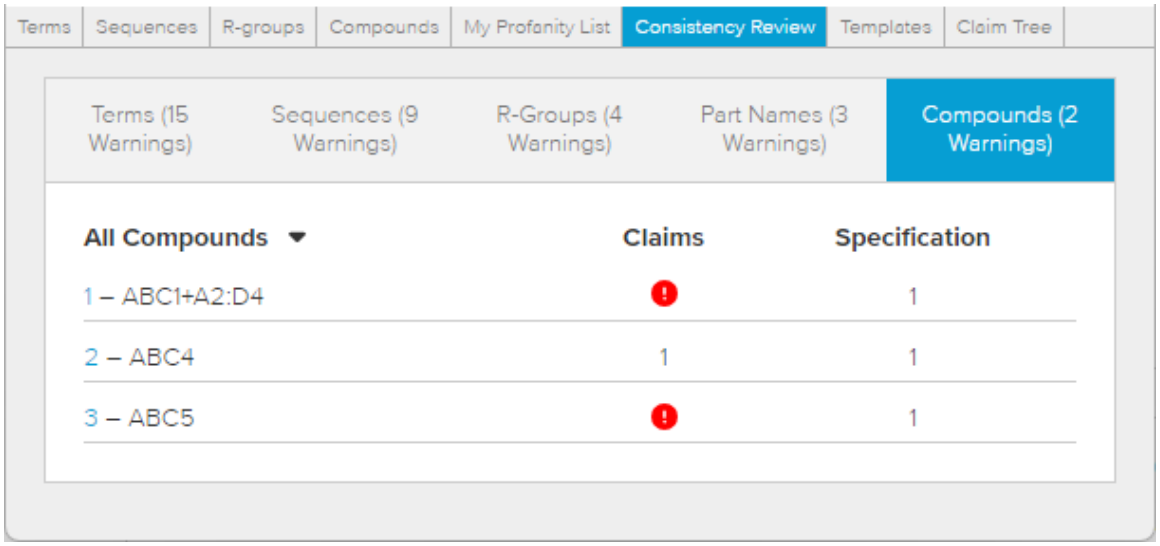
3. Click the Compounds Table option to insert the Compound/Example table at your cursor location.
4. A table containing populated columns with the Compound/Example number, the structure drawing, the systematic name, and the molecular weight will be inserted at your cursor location.



Note that we recommend you only insert this table after you've ensured your compounds are ordered and described as desired. But if you need to make changes after you've inserted the table, it's easy to delete and reinsert it.

Check Compound Support with Consistency Review

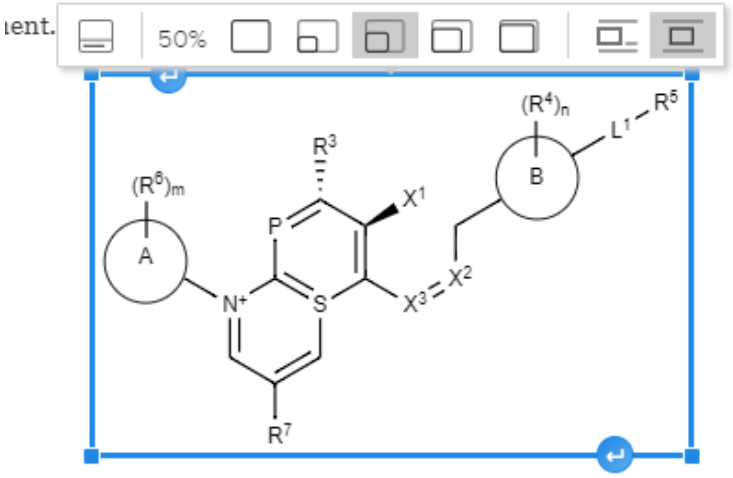
1. Open the Consistency Review window.
2. Select the Compounds tab.



3. Review the warnings for data that is not included in your claims and specification, and correct your application by inserting compound data into your claims and specification as needed.

Add a Molecular Drawing from ChemDraw

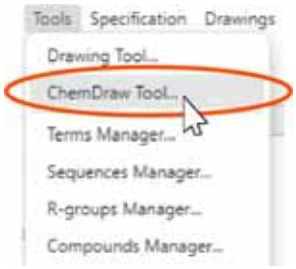
1. Copy your molecule(s) from the ChemDraw Application as CDXML text.
2. Place your cursor in the Rowan Patents application window where you wish to add the copied molecule(s).
3. Paste the copied molecule data at your cursor location using Ctrl-V/Cmd-V or the Edit menu Paste option.



4. The molecule(s) will be displayed in .svg format but will remain editable in the ChemDraw Tool.
5. If your molecular drawing contains Markush group labels, Rowan Patents can identify these and help you define and track them.

Add a Molecular Drawing with the Integrated ChemDraw Tool

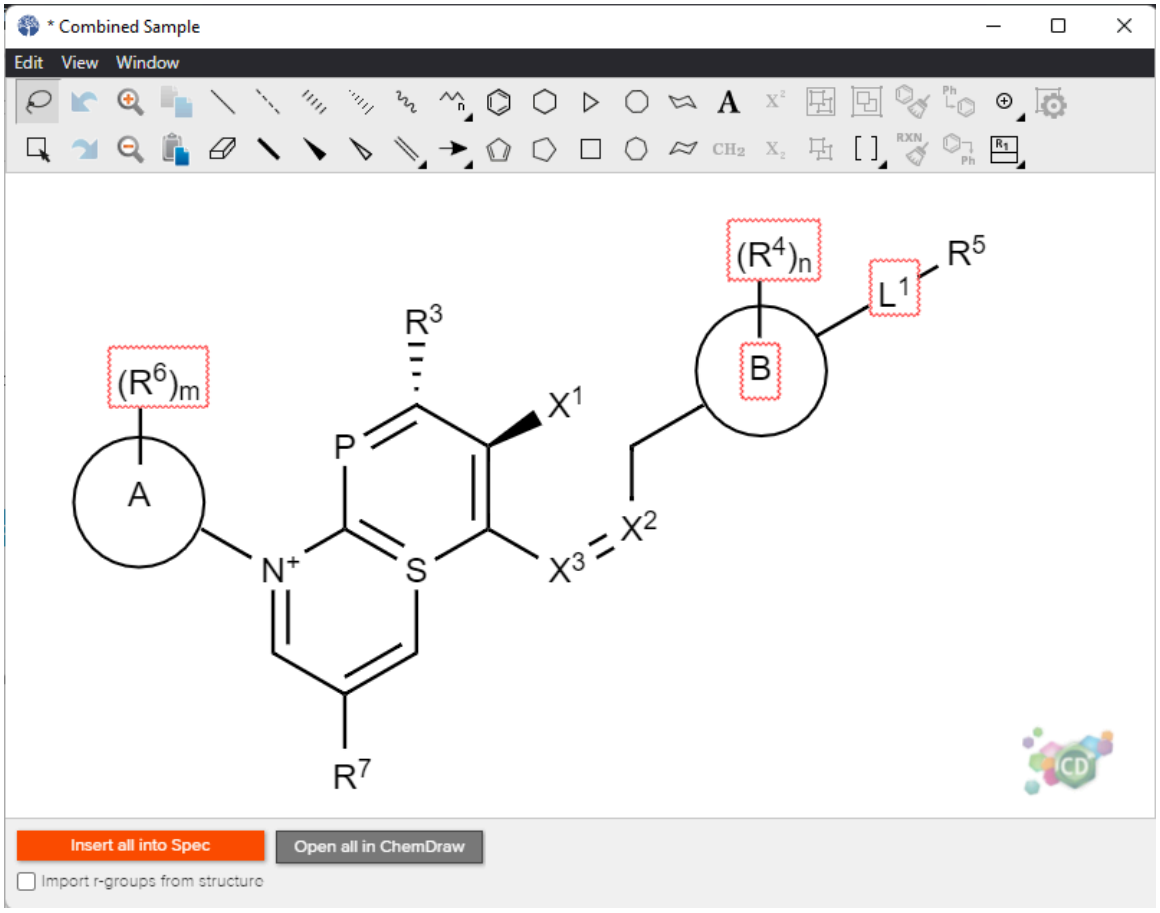
1. Place your cursor in the Rowan Patents application window where you wish to add your molecule drawing(s).
2. Open the Rowan integrated ChemDraw Tool from the Tools menu.



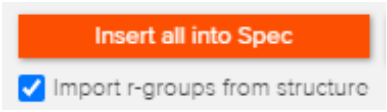
3. Use the tools provided to draw your desired molecule(s).

OR copy a molecule from ChemDraw as CDXML text and paste the copied data into the integrated ChemDraw tool.

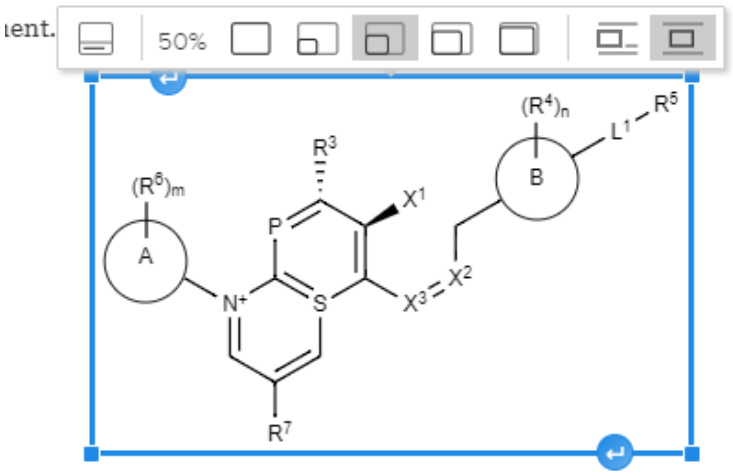
4. Once your molecular drawing is complete, click the Insert all into Spec button provided at the lower left-hand corner of the window.



A checkbox is provided allowing you to instruct the tool to detect Markush groups as drawings are inserted into your application.

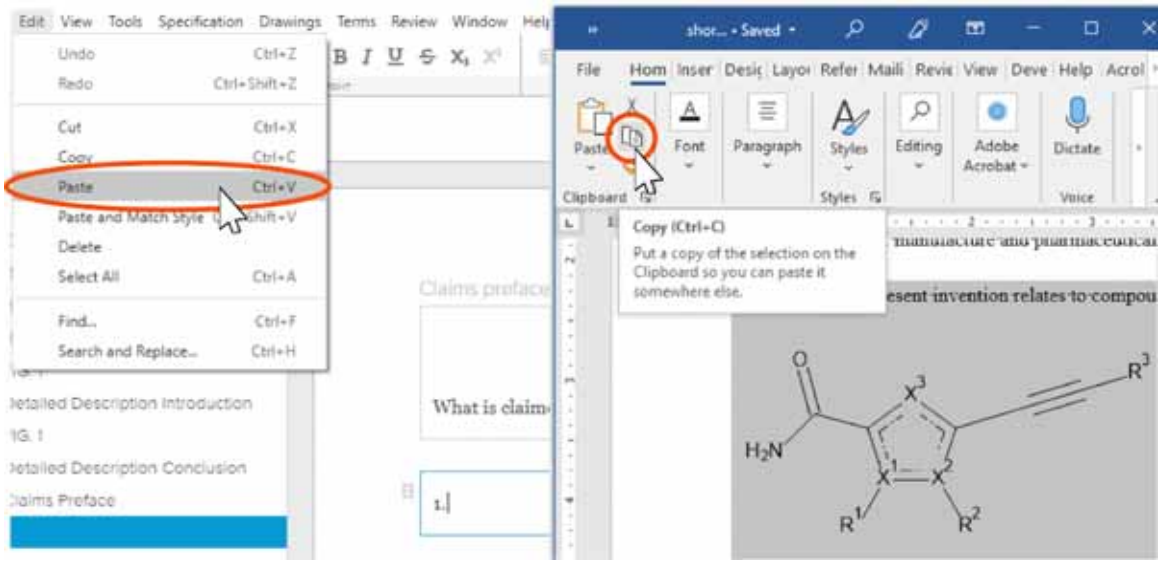


5. The molecule(s) will be displayed in .svg format but will remain editable in the ChemDraw Tool.

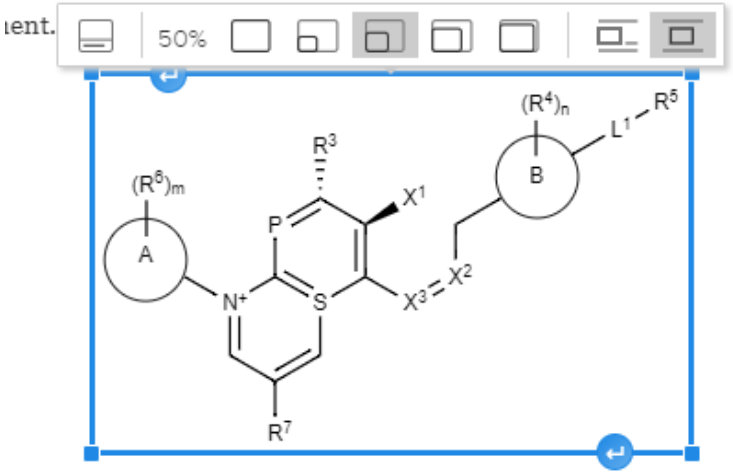


Add a ChemDraw Molecular Drawing from Word

1. Open your .docx file in your Word application.
2. Select and copy the molecular drawing(s) (and additional text if desired) in your .docx file.
3. Place your cursor in the Rowan Patents application window where you wish to add the copied molecule(s).
4. Paste the copied molecule data at your cursor location using Ctrl-V/Cmd-V or the Edit menu Paste option



5. The molecule(s) will be displayed in .svg format but remain editable in the ChemDraw Too



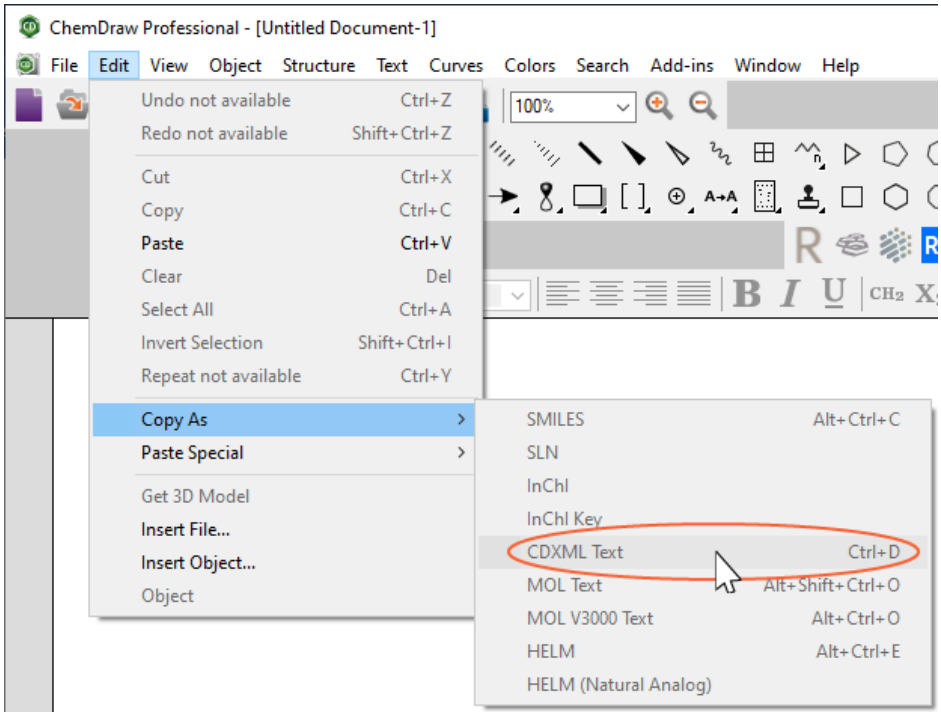
Note that you can also open your .docx file in Rowan Patents, or merge in Word content, to bring ChemDraw molecular drawings from Word into Rowan Patents.

6. If your molecular drawing contains Markush group labels, Rowan Patents can identify these and help you define and track them.

Copy a Molecule from ChemDraw as CDXML Text

1. Open a ChemDraw file in the ChemDraw application.
2. Select the molecule(s) you wish to copy using the lasso tool or Select All command.
3. Copy molecules as CDXML text using Ctrl+D/Cmd-D

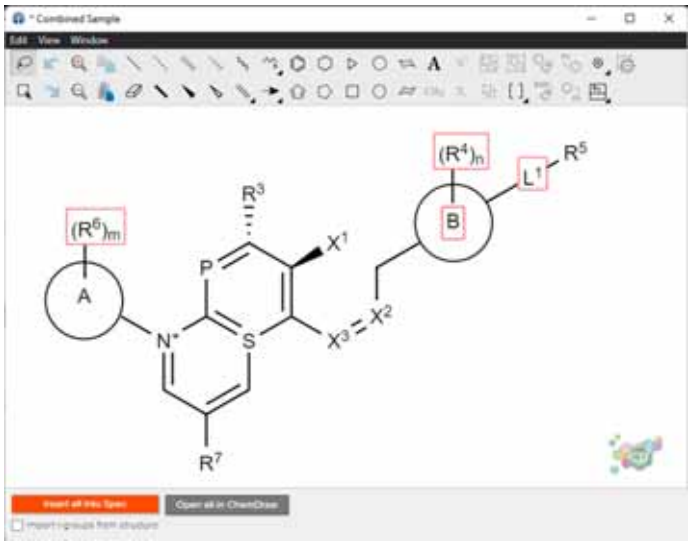
   OR use the Edit menu Copy As > CDXML Text option.



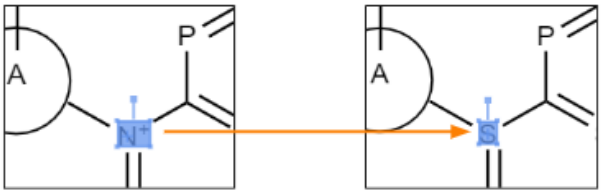
4. The copied text can be pasted into the integrated ChemDraw Tool or directly into your Rowan Patents application.

Edit a ChemDraw Molecular Drawing

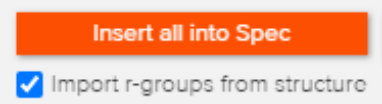
1. Double-click the desired molecular drawing where it is shown in your specification or claims. An inline instance of the integrated ChemDraw Tool will open.



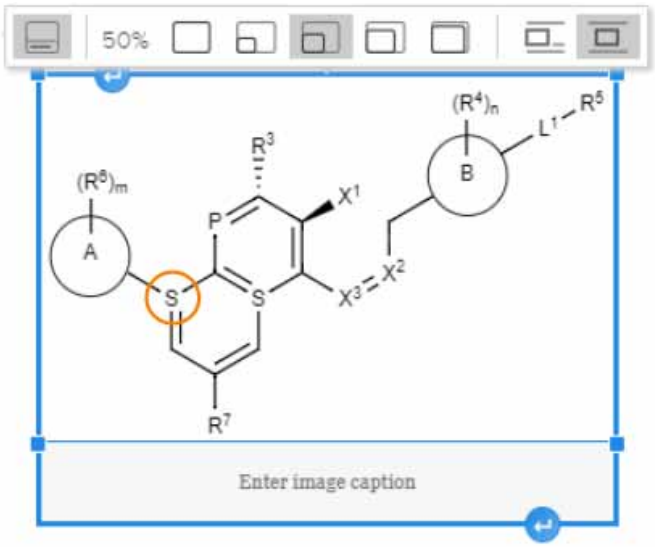
2. Edit your molecular drawing as desired.



3. When your edits are complete, be sure that all or no elements are selected. If individual elements are selected, that is all that will be inserted into your application.
4. Click the Insert all into Spec button.



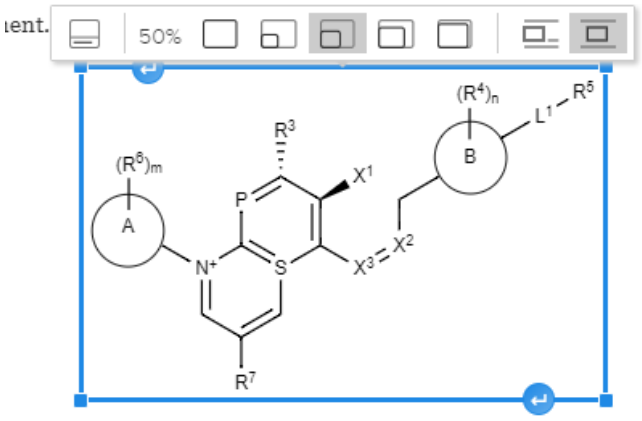
5. The updated molecular drawing will replace the previous version in your application.



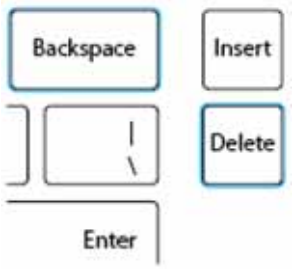
If you've added or modified any R-groups, be sure to re-import them from your updated drawing, or add or edit them in the R-groups Manager.

Delete a ChemDraw Molecular Drawing

1. Click to select the molecular drawing you want to delete.



2. Press your keyboard's Backspace or Delete key to delete the drawing.

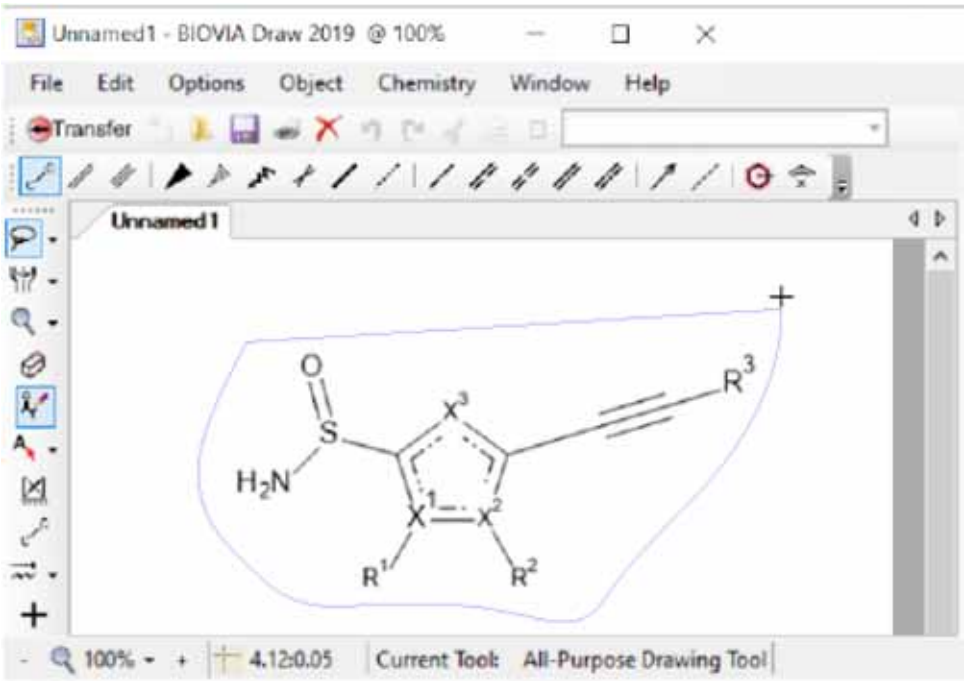


Note that R-groups imported from the drawing will remain in the R-groups manager, and would need to be deleted individually if desired.

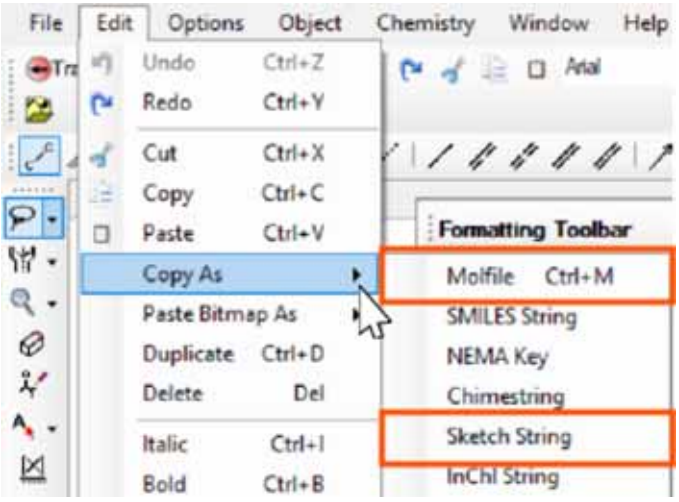
Add a Molecular Drawing from BIOVIA Draw

Note that BIOVIA Draw support is limited to BIOVIA Draw 2019 or later, for Windows.

1. Open a BIOVIA Draw file in the BIOVIA Draw application and select the molecule(s) you wish to import.



2. Copy the molecule(s) using the Edit > Copy As > Sketch String or Molfile (Ctrl+M) menu options.

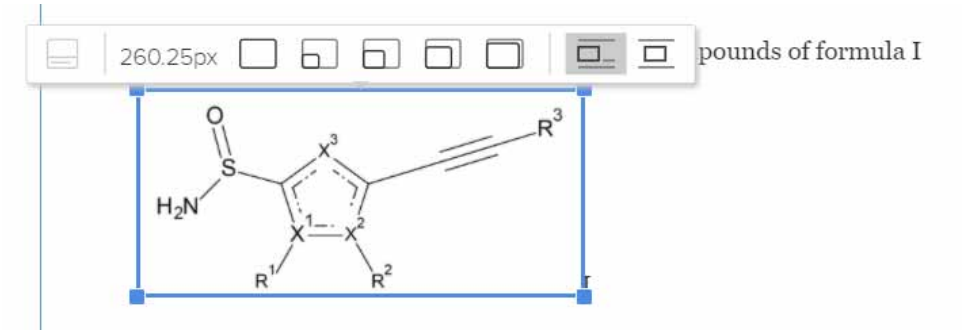


BIOVIA Draw molecular drawing data must be MOL/RXN compliant for Molfile data to display correctly. Refer to BIOVIA support documentation for more information.

3. Place the cursor where you want to paste the molecules within the main drafting window.

4. Use Ctrl+V/Cmd-V or the Paste option in the Edit menu to paste the molecule(s)

at your cursor location.

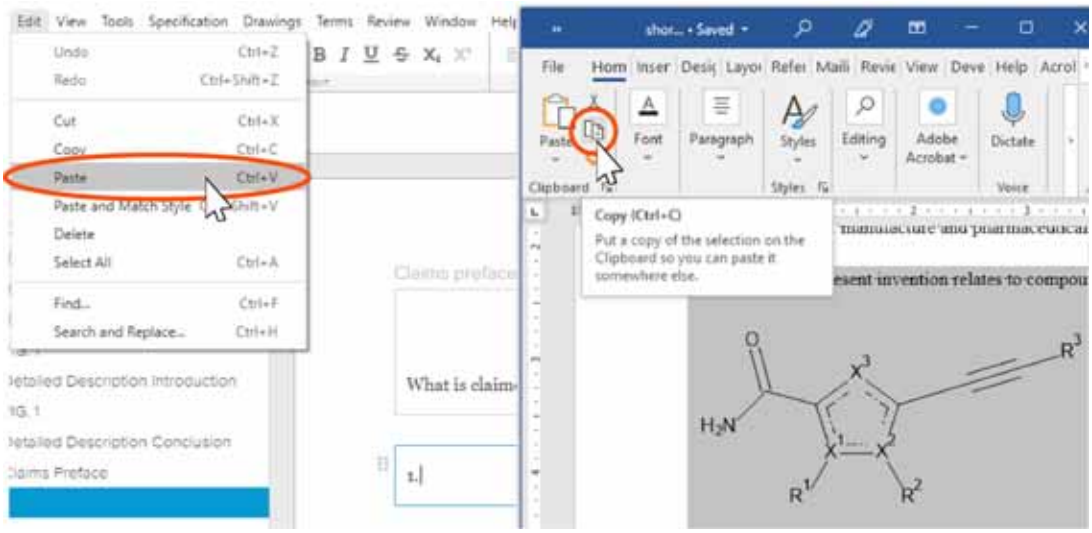


The molecule(s) will be displayed in .png format, but remain editable.

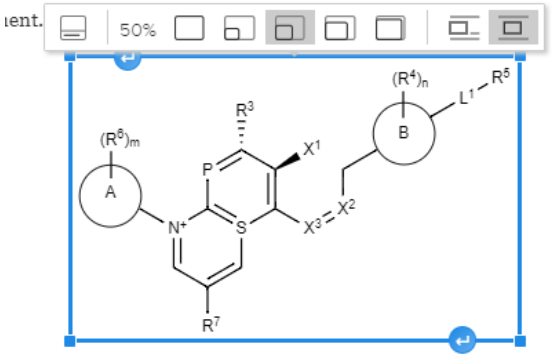
5. If your molecular drawing contains Markush group labels, Rowan Patents can identify these and help you define and track them.

Add a BIOVIA Draw Molecular Drawing from Word

1. Open your .docx file in your Word application.
2. Copy the molecular drawing(s) (and additional text if desired) in your .docx file.
3. Place your cursor in the Rowan Patents application window where you wish to add the copied molecule(s).
4. Paste the copied molecule data at your cursor location using Ctrl-V/Cmd-V or the Edit menu Paste option.



5. The molecule(s) will be displayed in .png format, but remain editable.

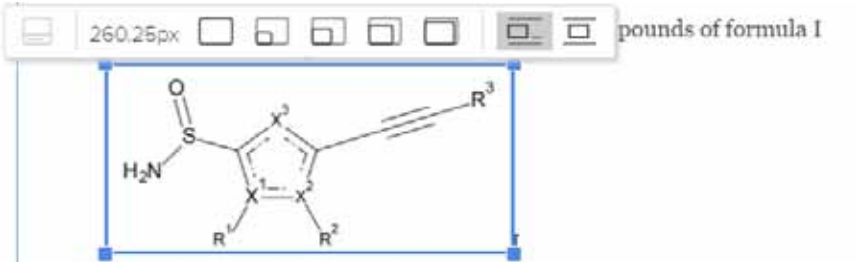


Note that you can also open your .docx file in Rowan Patents, or merge in Word content, to bring ChemDraw molecular drawings stored in Word into Rowan Patents.

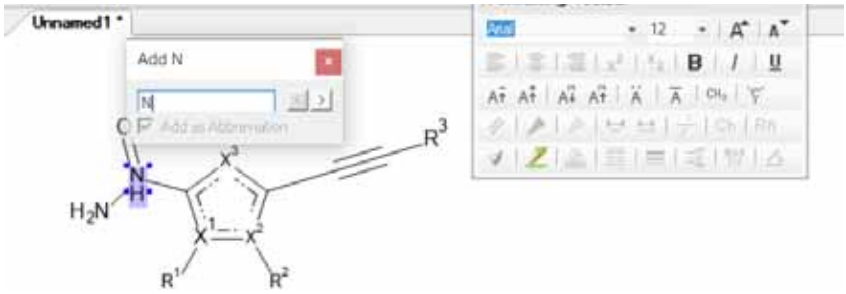
6. If your molecular drawing contains Markush group labels, Rowan Patents can identify these and help you define and track them.

Edit a BIOVIA Draw Molecular Drawing

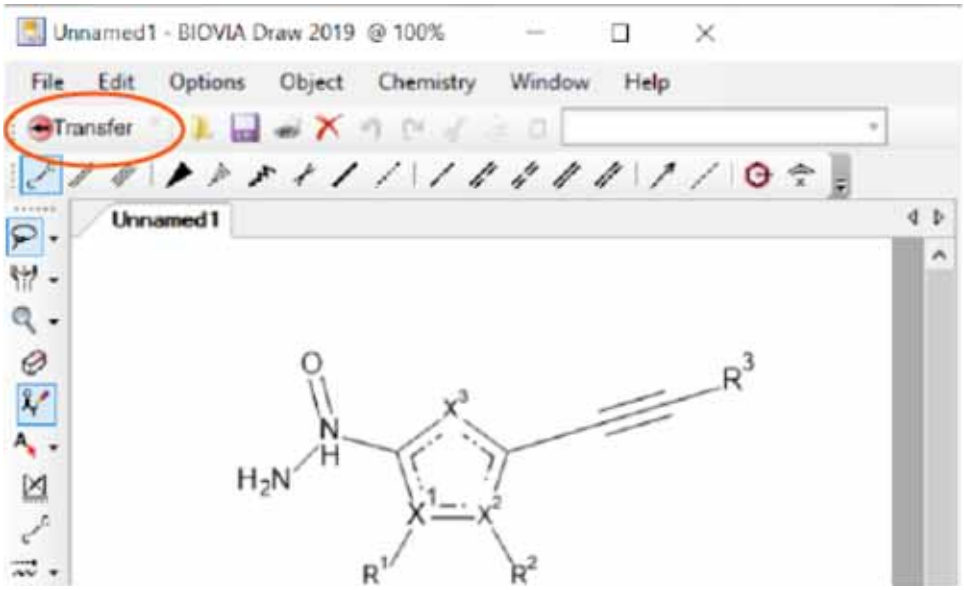
1. Double-click the molecular drawing in your application. An instance of BIOVIA Draw will open.



2. Edit your molecular drawing as desired.



3. When your edits are complete, click the transfer button in the top left corner of the BIOVIA Draw window.

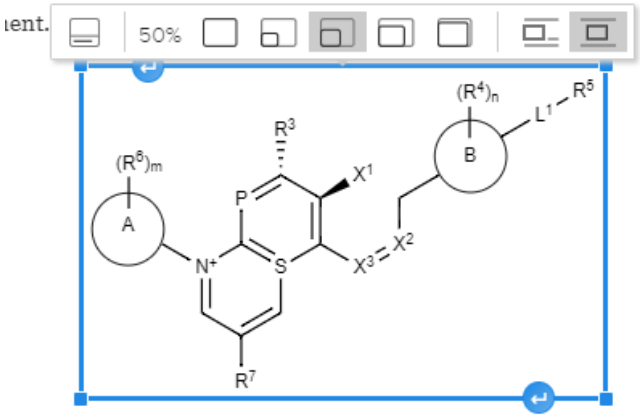


4. The updated molecular drawing will replace the previous version in your application.

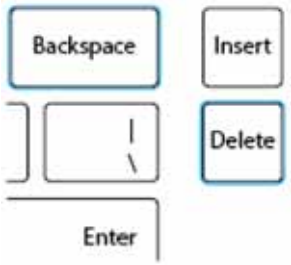
   If you've added or modified any R-groups, be sure to re-import them from your updated drawing, or add or edit them in the R-groups Manager.

Delete a BIOVIA Draw Molecular Drawing

1. Click to select the molecular drawing you want to delete.



2. Press your keyboard's Backspace or Delete key to delete the drawing.

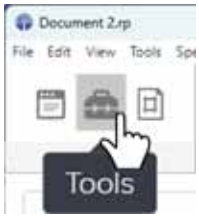


Note that R-groups imported from the drawing will remain in the R-groups manager, and would need to be deleted individually if desired.

Open the R-Groups Manager

Open the R-groups Manager from the Toolbar Buttons

3. Click the Tools button in the main application window toolbar or Drawing Tool toolbar.

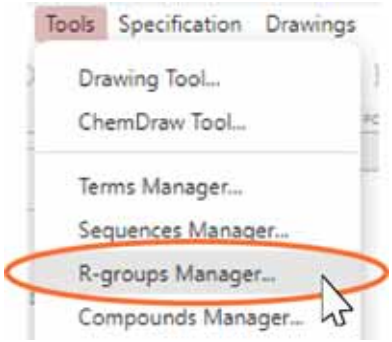


4. If necessary, click the R-Groups Manager tab in the Tools window.

If you do not see the R-groups tab, you can request access.

Open the R-groups Manager from the Tools Menu

1. Click the Tools menu in any window.
2. Click the R-groups Manager option under the Tools Menu.



If you do not see the R-groups Manager in the Tools menu, you can request access.

Open the R-groups Manager from the Right-Hand Sidebar

1. Click the Rx icon to expand the R-groups panel in the right-hand sidebar of the main application window.

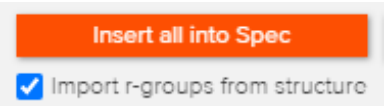
   If you do not see the Rx icon and R-groups panel to the right, you can request access.

2. Click the pencil icon at the top of the panel to open the R-groups Manager.

Add R-Groups (Markush Groups) from Editable Molecular Drawings

Importing R-groups with the integrated ChemDraw Tool

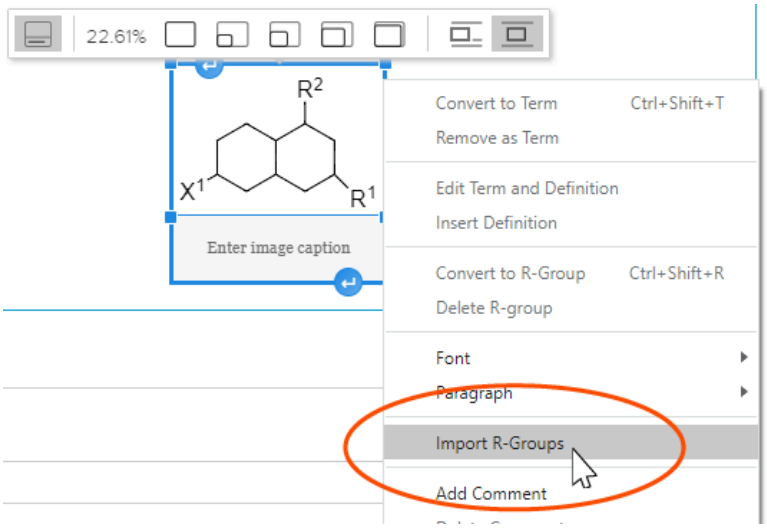
1. After adding or editing a molecular structure drawing in the integrated ChemDraw tool, select the Import r-groups from structure option before inserting your drawing into your application.



2. Labels detected as representing Markush groups rather than elements will be populated in the R-groups Manager.

Importing R-groups Using the Context Menu

1. Locate the editable molecule drawing within your specification.
2. Right-click the molecule drawing to open the context menu.
3. Select the Import R-groups option, underneath the Font and Paragraph sections.



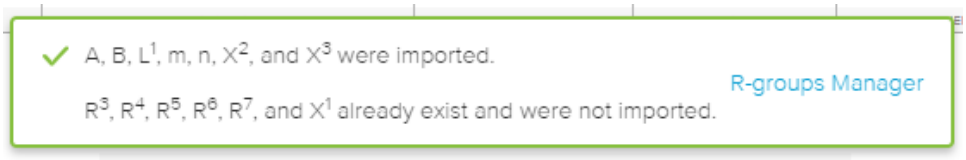
4. Labels in the molecule drawing will be examined, and detected Markush groups will be added to the R-groups Manager.

Note that you can enter the R-groups Manager to inspect imported groups by clicking the link provided in this message.

5. R-groups that already appear in application text will be tagged as data objects and maintained consistent with changes in the R-groups Manager.

[0029] or a stereoisomer, tautomer, or pharmaceutically acceptable salt thereof, having the following molecular groupings: R^1, R^2, and X^1.

6. If labels match groups that already exist in the R-groups Manager, they will be omitted from the import.



Note that Markush groups CAN be detected from ChemDraw and BIOVIA Draw molecular drawings added to Rowan from:

- BIOVIA Draw
- ChemDraw
- the integrated ChemDraw Tool
- Word

Markush groups CANNOT be detected from non-editable molecule images, such as inserted PNGs, JPEGs, or SVGs.

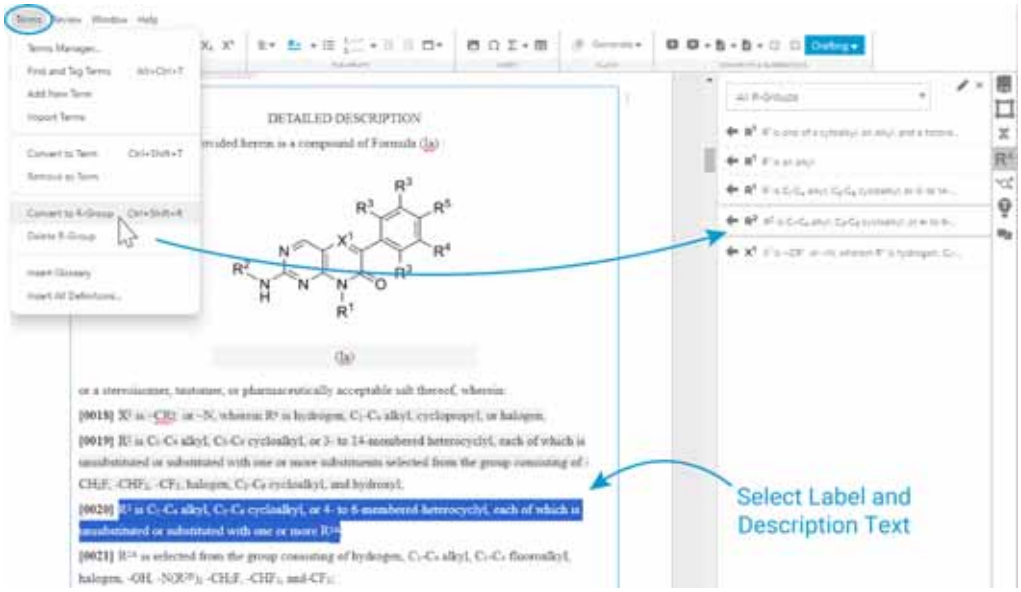
Create an Individual R-Group (Markush Group)

Create from Specification Text

1. Locate the text in your specification that labels and describes your Markush group.
2. Select the label and description text.
3. Press Ctrl+Shift+R (Cmd-Shift-R for Macs)

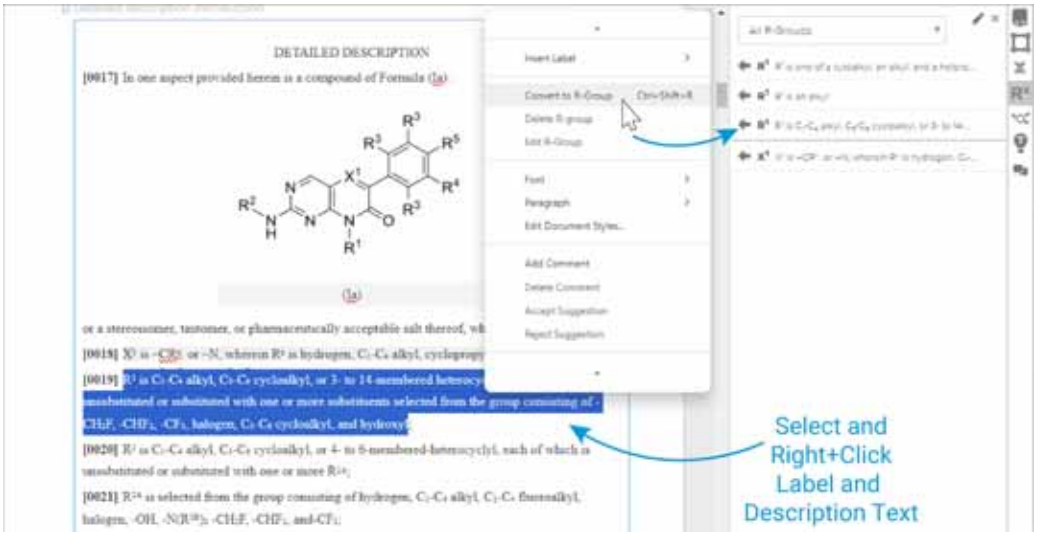
   OR

   Select the Convert to R-Group option from the Terms menu



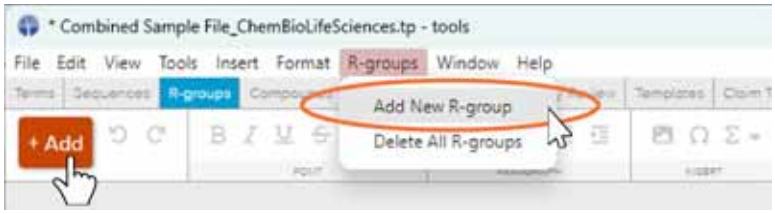
OR

Right-click the selected text and select Convert to R-Group from the context menu provided.

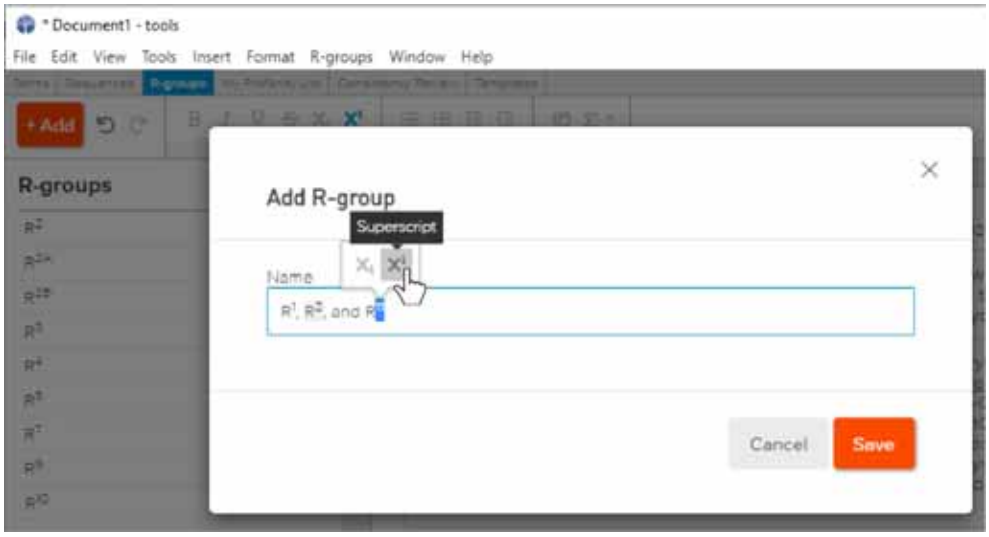


Create in the R-groups Manager

1. Open the R-groups Manager.
2. Click the +Add button or the Add New R-group option under the R-groups menu.



3. Enter your group name.



Note that your group name can nest other R-groups (e.g., "R2 and R3"). Existing R-groups nested this way will be individually tagged and will reflect name updates wherever used.

Ctrl+Shift+= turns superscript style on/off. Ctrl+= toggles subscript style. Sub/superscript styles can also be applied to selected characters using toolbar or popup controls where provided.

4. Click the Save button.
5. Add descriptions for your R-groups.

Edit an R-Group (Markush Group)

1. Right click the label for the R-group you wish to edit in your specification text and select the Edit R-Group option from the context menu

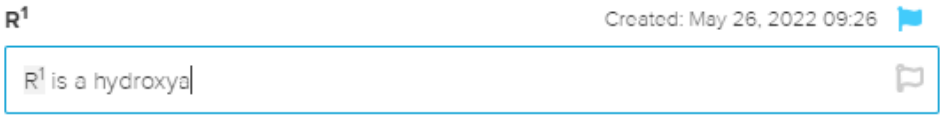
OR Open the R-groups Manager, locate the entry for the desired R-group in the left-hand sidebar listing, and click the edit pencil icon that appears on hover.

2. Make the desired changes in the dialog presented.

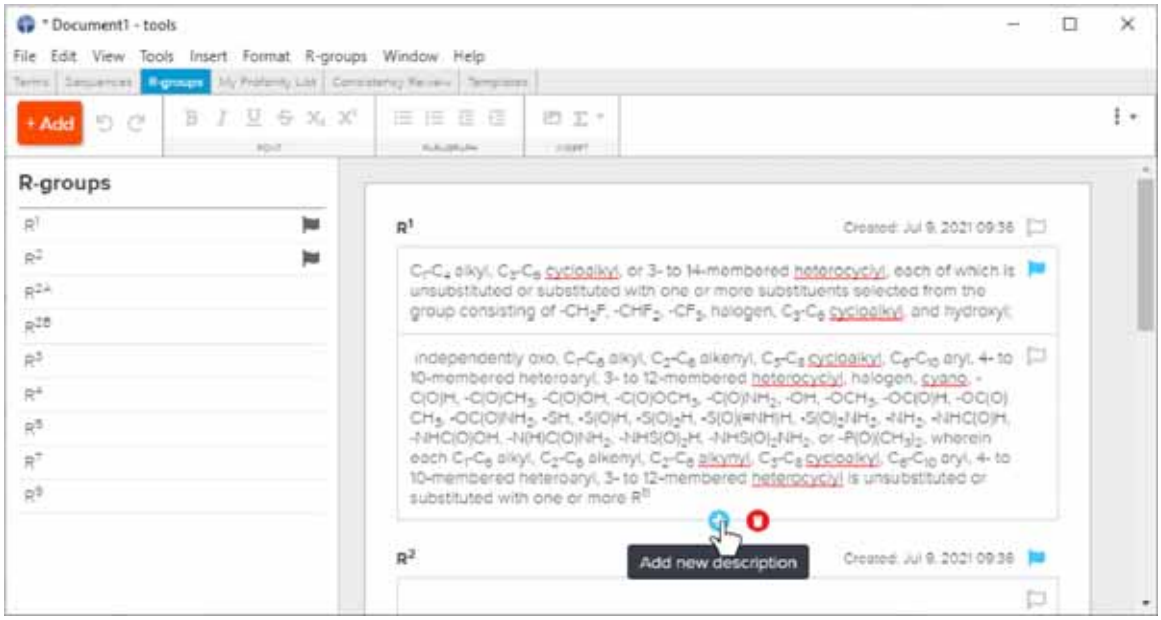
3. Click the Save button.
4. See Describe an R-group for description edits.

Describe an R-Group (Markush Group)

1. Open the R-groups Manager.
2. Locate and click the entry for the desired R-group in the left-hand sidebar listing or scroll down the window to the description fields for the desired R-group.
3. Enter or update a description for your R-group in the description field provided.



4. Click the Add New Description control presented on hover for the last existing field to add as many description fields as desired.



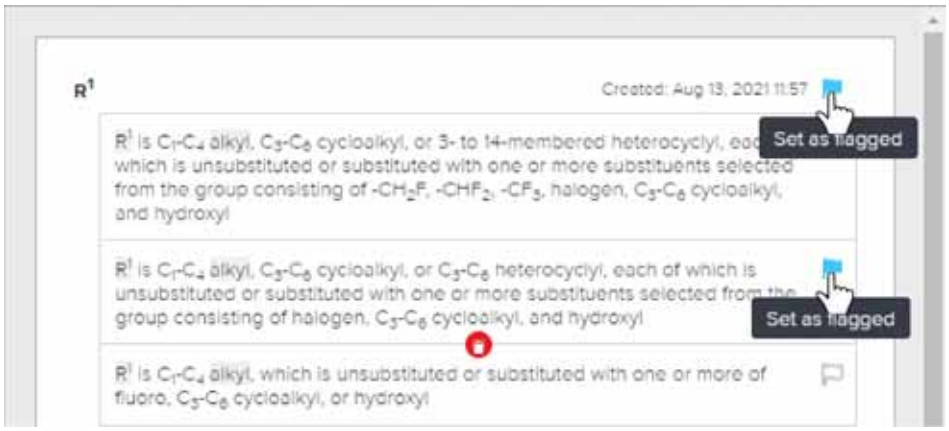
5. Individual descriptions can be reordered and deleted as needed.

Flag Key R-Groups and Key R-Group Descriptions

1. Open the R-groups Manager.
2. Locate and click the entry for the desired R-group in the left-hand sidebar listing

or scroll down the window to the description fields for the desired R-group.

3. Click the flag icon to the upper right of all R-Group description fields to flag the entire R-group as key to your application.
4. Click the flag icon to the upper right of each key description.

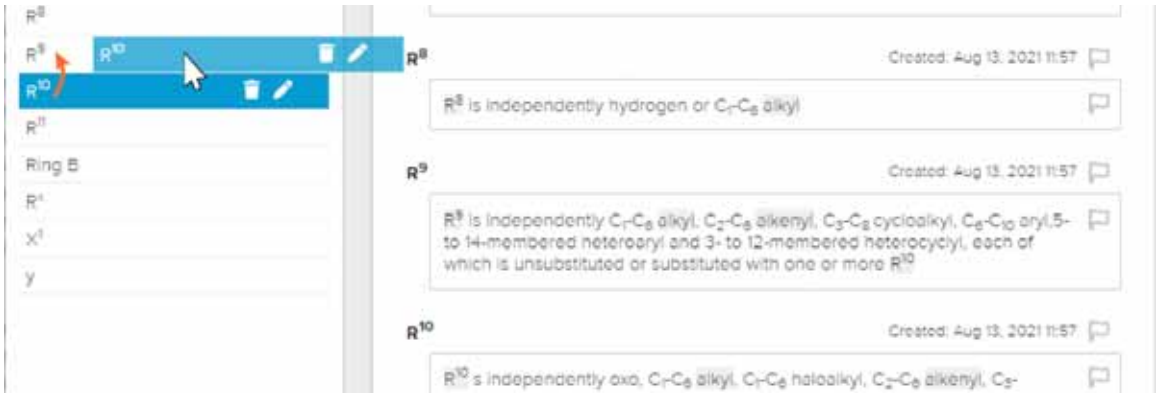


Note that flagging is only visible within the Rowan Patents integrated drafting environment. None of the data exported for filing will indicate which R-groups or descriptions have been flagged.

5. To unflag a flagged R-group or description, click the flag icon again.

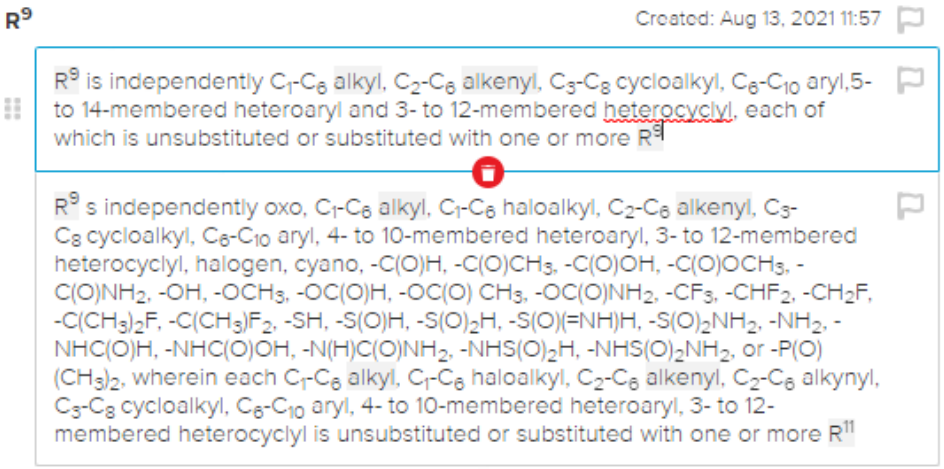
Merge R-Groups

1. Open the R-groups Manager.
2. Locate the entry for the desired R-group in the left-hand sidebar list.
3. Click and drag that entry up or down the list, and drop it onto the listing for the R-group you want to merge it with.



4. Click the Merge button in the confirmation dialog.

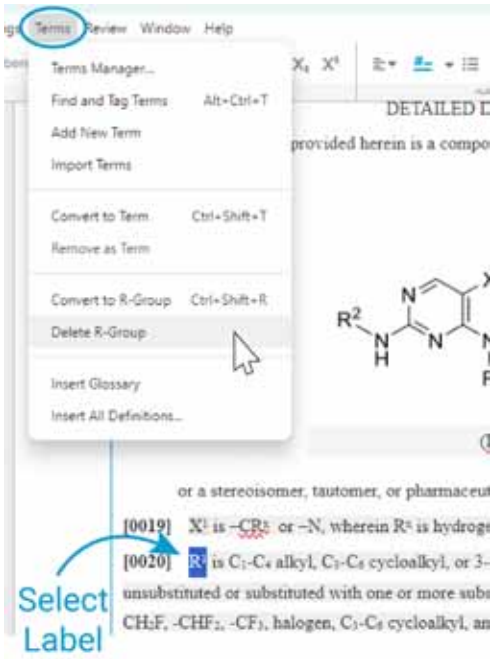
5. The R-group label for the entry you dragged and dropped will be replaced with the label for the target entry in all instances. All descriptions will be moved to the target R-group and listed as such in the application.



Delete an R-Group (Markush Group)

Delete from the Specification

1. Locate the text for your R-group label in your specification.
2. Select the label text.
3. Select the Delete R-Group option from the Terms menu

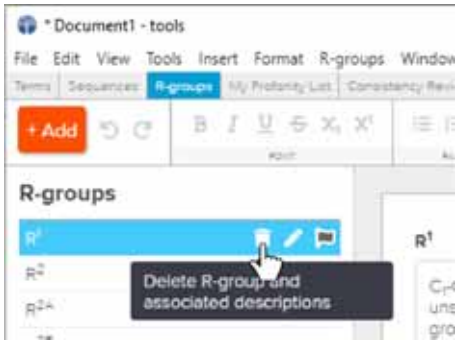


OR

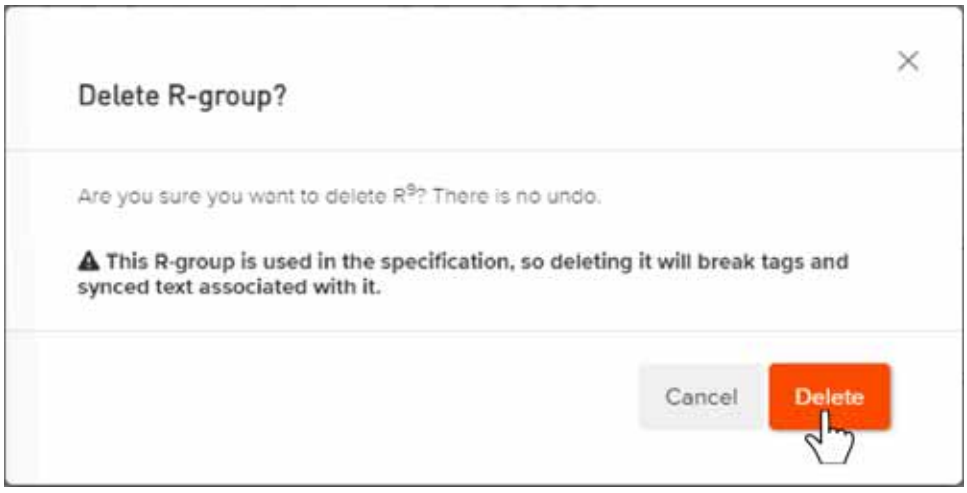
Right-click the selected text and select Delete R-group from the context menu provided.

Delete in the R-groups Manager

1. Open the R-groups Manager.
2. Locate the entry for the desired R-group in the left-hand sidebar list.
3. Hover over the R-group entry and click the trashbin icon that appears on hover.



4. Confirm your deletion in the dialog presented.

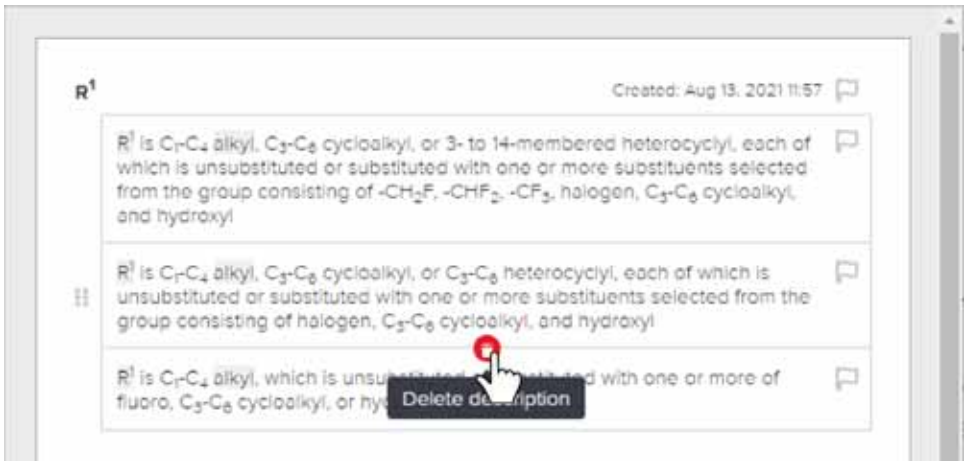


5. Text previously tagged as R-group data will be highlighted in your application to facilitate making the appropriate updates as you desire.

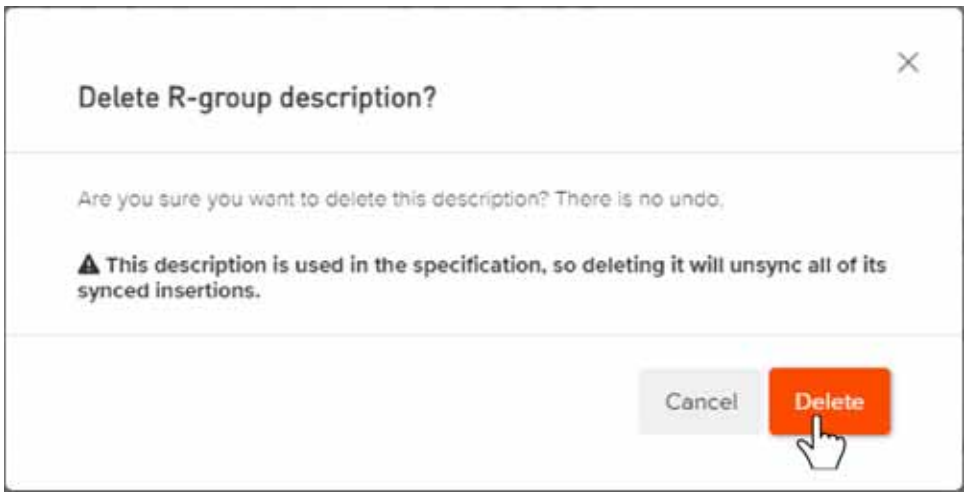
[0042] each R^9 is independently C_1-C_6 alkyl, C_2-C_6 alkenyl, C_3-C_8 cycloalkyl, C_6-C_{10} aryl,5- to 14-membered heteroaryl and 3- to 12-membered heterocyclyl, each of which is unsubstituted or substituted with one or more R^9;

Delete an R-Group Description

1. Open the R-groups Manager.
2. Locate and click the entry for the desired R-group in the left-hand sidebar listing or scroll down the window to the description fields for the desired R-group.
3. Hover over the description you wish to delete.
4. Click the Delete description control that appears on hover.



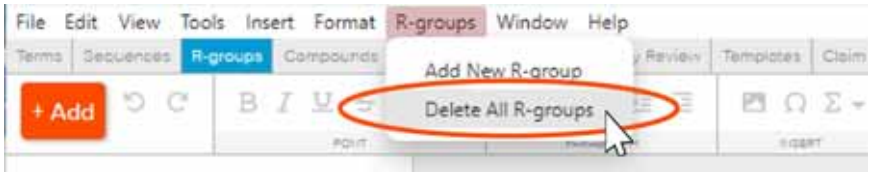
5. Confirm your deletion in the confirmation dialog.



6. Text previously tagged for the deleted definition will be highlighted in your application to facilitate making the appropriate updates as you desire.

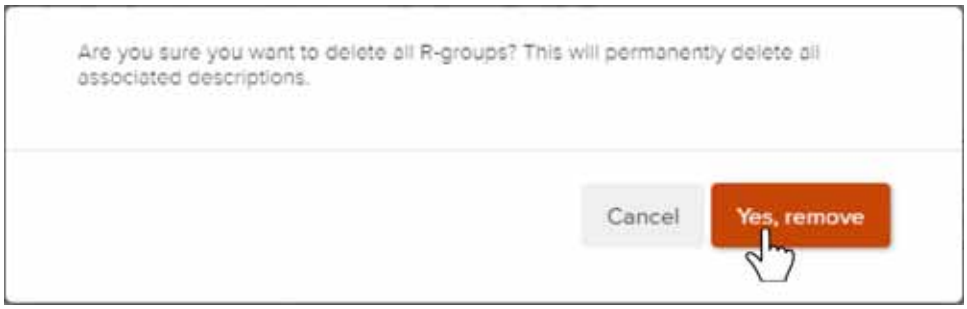
Remove All R-Groups (Markush Groups)

1. Open the R-groups Manager.
2. Select the Delete All R-groups option from the R-groups menu.

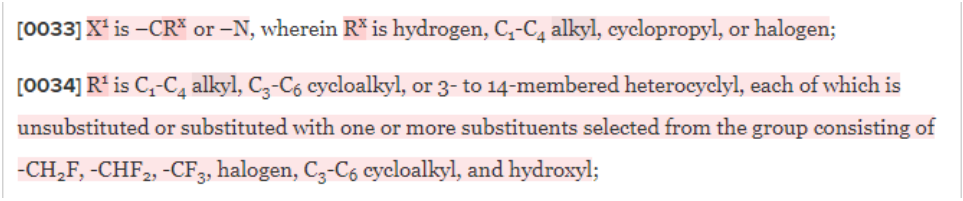


Note that this deletes data object tagging and data, but does not remove the tagged text from your application.

3. Confirm your deletion in the confirmation dialog.



4. Text previously tagged as R-group data will be highlighted in your application to facilitate making the appropriate updates as you desire.



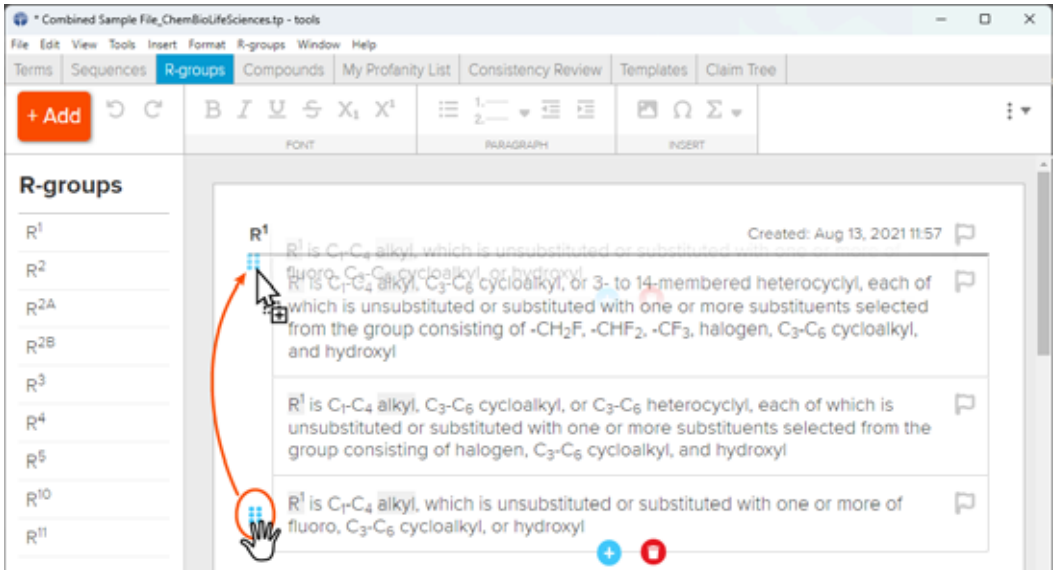
[0033] X^1 is $-CR^X$ or $-N$, wherein R^X is hydrogen, C_1-C_4 alkyl, cyclopropyl, or halogen;

[0034] R^1 is C_1-C_4 alkyl, C_3-C_6 cycloalkyl, or 3- to 14-membered heterocyclyl, each of which is unsubstituted or substituted with one or more substituents selected from the group consisting of $-CH_2F$, $-CHF_2$, $-CF_3$, halogen, C_3-C_6 cycloalkyl, and hydroxyl;

Reorder R-Group Descriptions

1. Open the R-groups Manager.
2. Locate and click the entry for the desired R-group in the left-hand sidebar listing or scroll down the window to the description fields for the desired R-group.

3. Hover over the R-group description you want to move. A drag handle will appear to the left of the description.
4. Use the drag handle to click and drag the description up or down in the description order.



5. Drop the description into the desired new position, as indicated by the insertion bar.

Insert R-Group (Markush Group) Information into an Application

Insertion from the Right-Hand Sidebar

1. Make sure your cursor is at the desired insertion point in your claims or specification.
2. Click the Rx icon to expand the R-groups panel in the right-hand sidebar.

3. Click the Rx listed label to insert the label as a tagged data object.

   Note that labels with multiple descriptions will appear at the head of each description option.

4. Click the description text or the insertion arrow to insert the description as an auto-synced data object.

R-group Label Autotagging as You Type

1. Begin typing the desired R-group label. Note, you do not have to include sub-/superscript styling as you type for autotagging.
2. Select from among the matching nicknames in the auto-complete menu presented

   OR

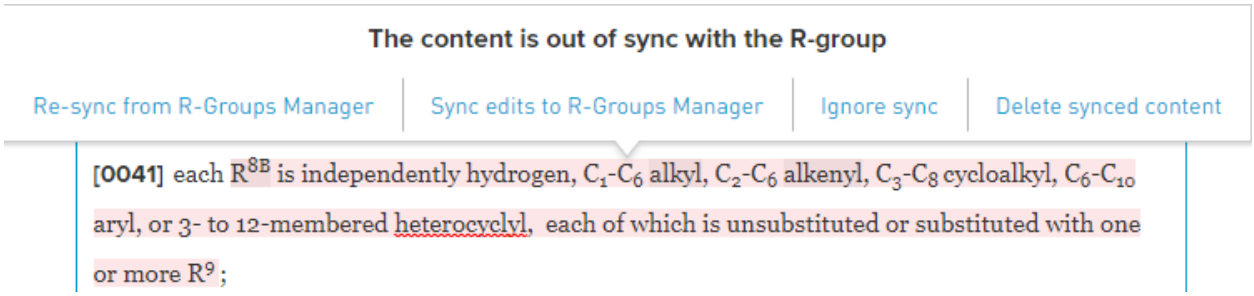
   Finish typing the label and hit space.

3. When you type the space following your R-group label number, the typed label will be tagged as a data object.

Description Revision Data Synching

Note that all changes made using the R-groups Manager are automatically reflected across your entire application.

1. If you type a change to the auto-synched R-group description data in your application, the data will be highlighted as out of sync with the R-groups Manager data.



2. The menu provided while your cursor is within the auto-synched text will allow you to:
    - Re-Sync from the R-groups Manager, undoing your change
    - Sync edits to the R-groups Manager, storing your updates and reflecting them across your application
    - Leave the text as is and ignore synchronization going forward, untagging your text, or
    - Delete the synched text, removing the text altogether.

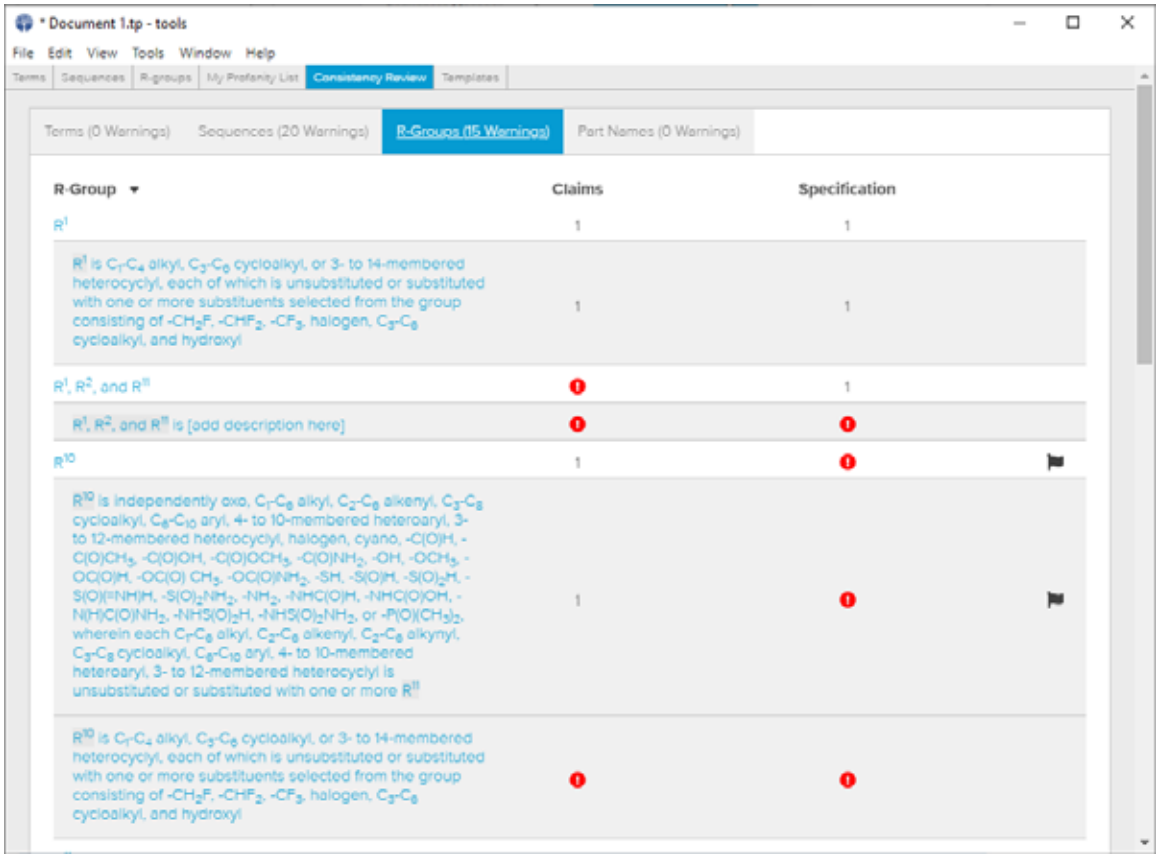
Now What?

Before you export for filing, you can use the Consistency Review tool to confirm you've supported your novel compounds in your application.

Check R-group Support with Consistency Review

1. Open the Consistency Review tool from the Tools menu or the Review menu.

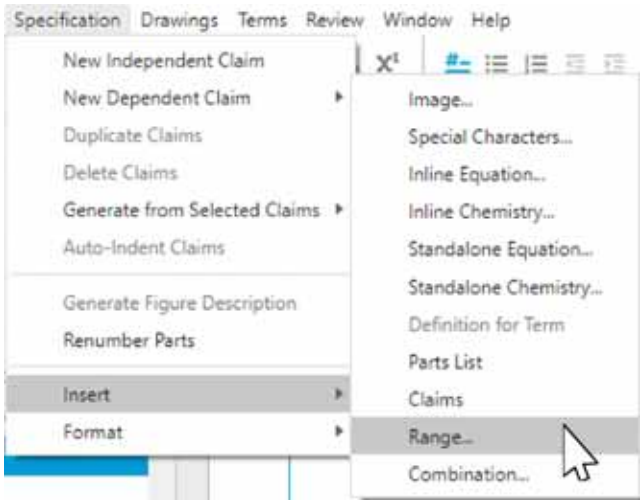
2. Select the R-groups tab.
3. Review the warnings for data that is not included in your claims and specification, and correct your application by inserting R-group labels and descriptions into your claims and specification as needed.



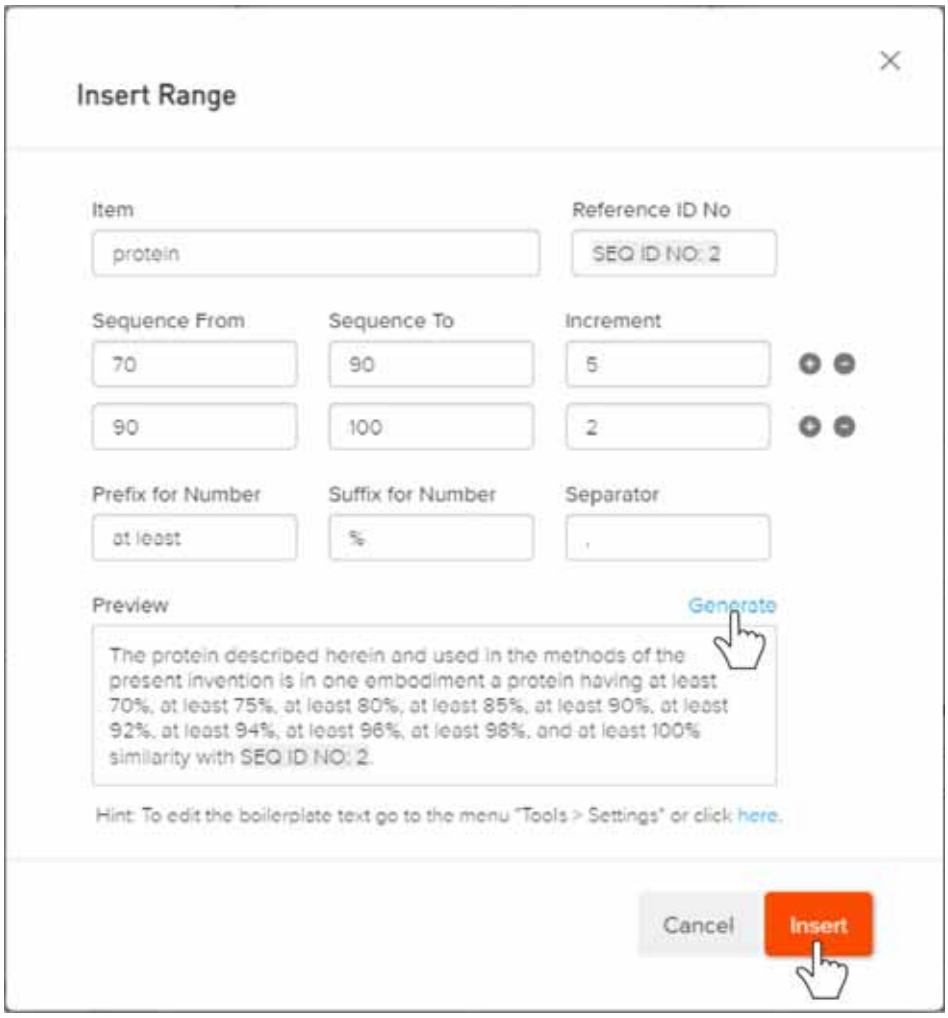
Insert Text Describing a Range of Values

Generating a Range Description

1. Place your cursor at the location in your application where you wish to describe a range of values.
2. Select the Insert > Range option under the Specification menu.



3. Enter the desired parameters in the Insert Range dialog.



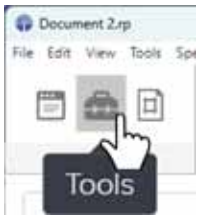
4. Click the Generate link to create Preview text.

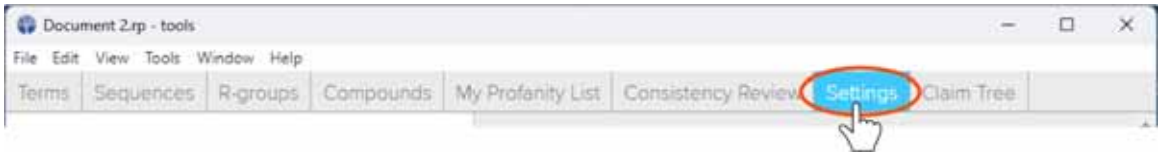
5. Modify the text in the preview field as desired.
6. Click the Insert button to insert the text at your cursor location.

   OR copy the preview text and paste it where desired in your application.

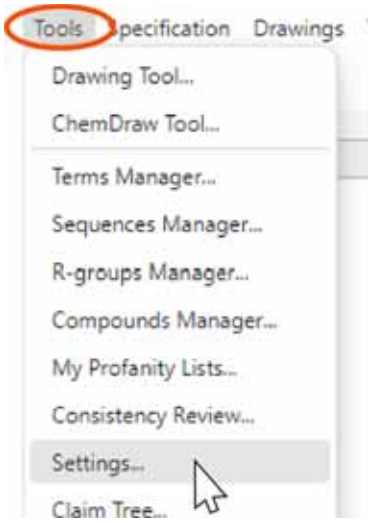
Reviewing and Changing the Range Generation Settings

1. Click the Tools button in the toolbar and navigate to the Settings tab if needed

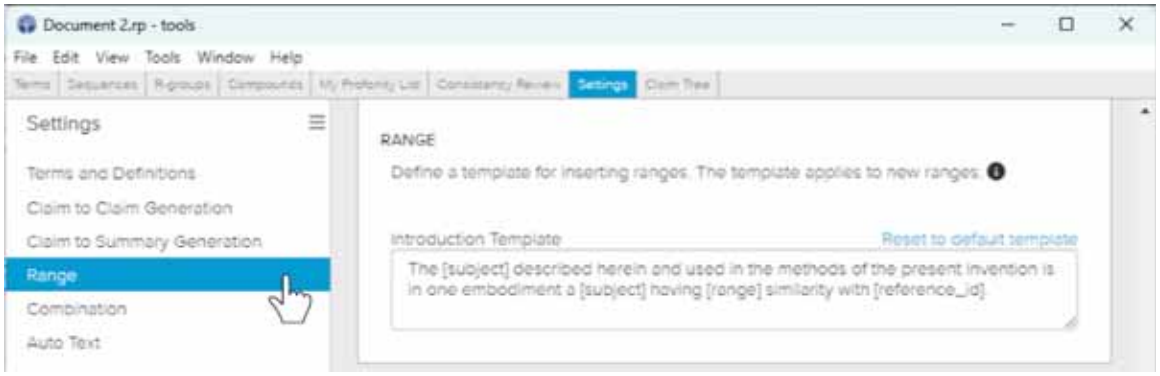




   OR Select the Settings option under the Tools menu.



2. Locate the settings for generating Range description text.
3. Review and make your desired changes using the controls.



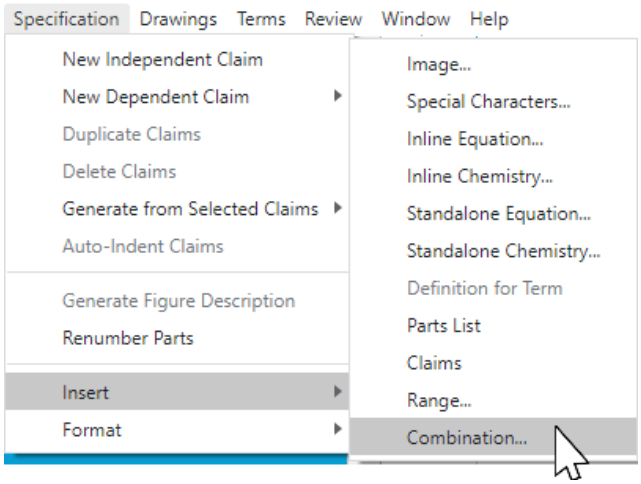
Modified settings will be stored as part of your user setup. Changes made in one application will be reflected across newly inserted ranges in all applications.

Range descriptions already inserted are not updated by settings changes.

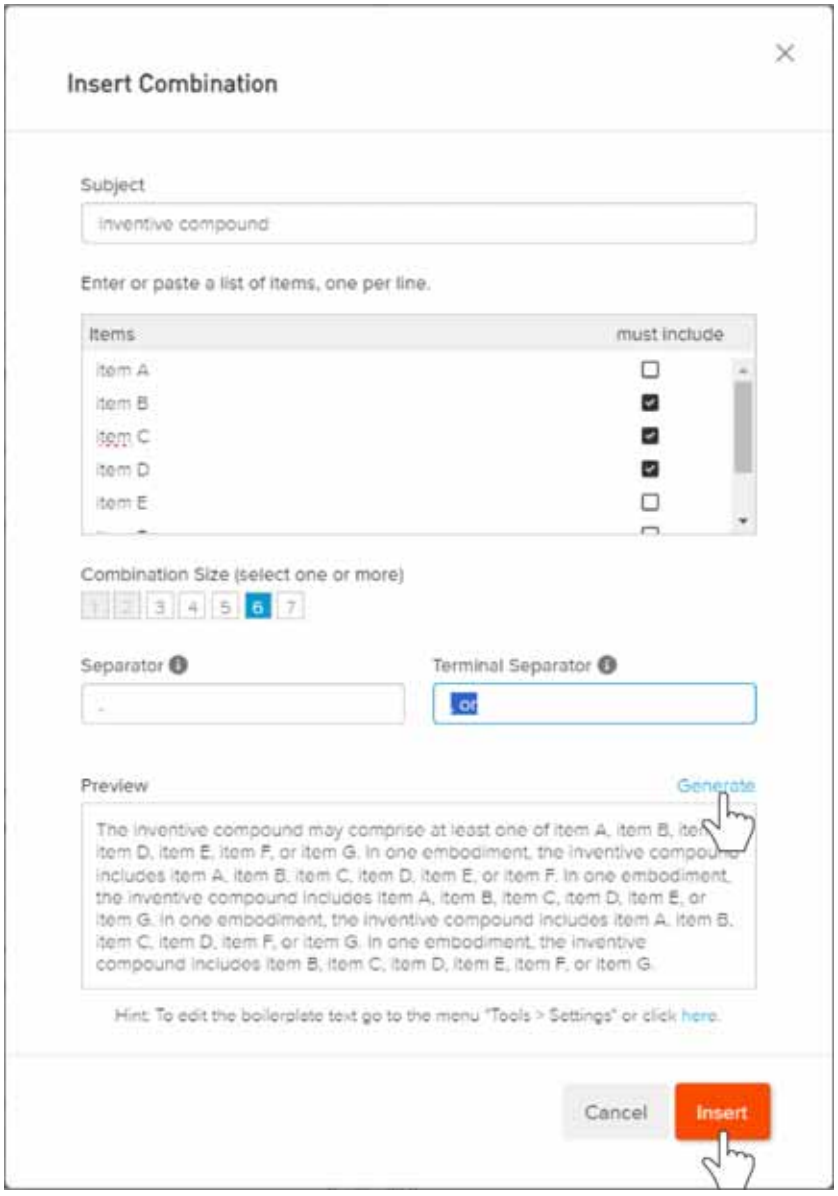
Insert Text Describing a Combination of Items

Generating a Combination Description

1. Place your cursor at the location in your application where you wish to describe a combination of items.
2. Select the Insert > Combination option under the Specification menu.



3. Enter the desired parameters in the Insert Combination dialog.



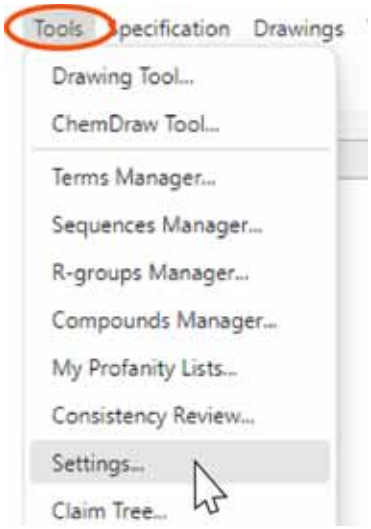
4. Click the Generate link to create Preview text.
5. Modify the text in the preview field as desired.
6. Click the Insert button to insert the text at your cursor location.

   OR copy the preview text and paste it where desired in your application.

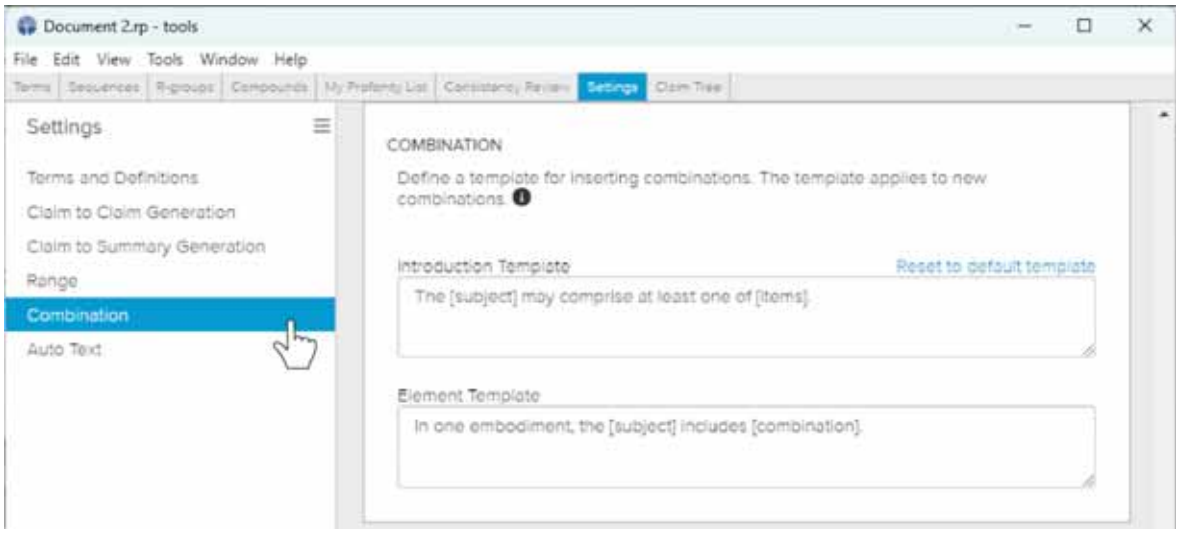
Reviewing and Changing the Combination Generation Settings

1. Click the Tools button in the toolbar and navigate to the Settings tab if needed

OR select the Settings option under the Tools menu.



2. Locate the templating controls for a Combination.
3. Review and make your desired changes using the controls.



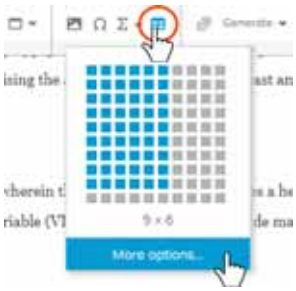
Modified settings text will be stored as part of your user setup. Changes made in one application will be reflected across newly inserted combinations in all applications.

Combination descriptions already inserted are not updated by settings changes.

Quickly Generate Table Content

Inserting Generated Table Content

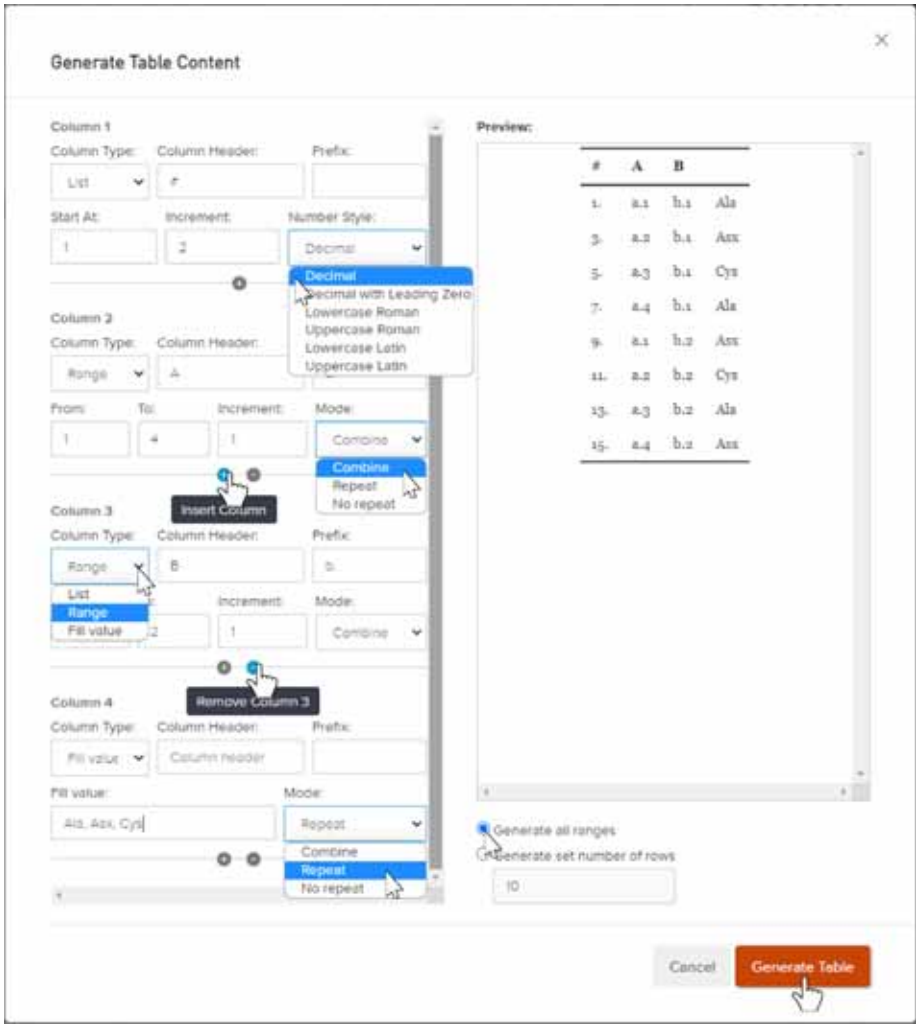
1. Place your cursor where you wish to insert your table.
2. Click the Insert Table control in the toolbar.
3. Click the More Options control.



4. In the Insert Table dialog, click the Generate Table Content link.

5. Use the controls presented in the Generate Table Content dialog to build your

table content. These controls are described in detail below.



A preview of your table is provided in the right-hand portion of this dialog.

6. Once your table meets your needs, click the Generate Table button. Your table will be inserted at your cursor location.

Description of Content Generation Controls

Add and Remove Columns

These controls are provided after each set of column parameters as shown, allowing you to add additional columns at that insertion point, or remove the column defined above. Note that the first column cannot be removed.

Column Type

This dropdown control allows you to select from among List, Range, and Fill Value types of data to be generated for each column. These types are described in more detail below, with respect to the parameters available for each.

Column Header

This text entry field allows you to assign header text that will appear at the top of the generated table for each column.

Prefix

This text entry field allows you to enter a text string that will appear as a prefix to the cell entries generated for that column based on the parameters below.

List Type and Parameters

Lists provide a set of increasing, non-repeating, alphanumeric values based on the following parameters.

- Start At - An integer value that may be typed or adjusted with arrows, indicating a list position at which generated list data will begin. The actual generated data will depend on the Number Style selected. E.g., a Start At value of "2" may yield a list datum of "2.", "02.", "B.", "b.", "II.", or "ii.".
- Increment - A numerical value that may be typed or adjusted with arrows, indicating a list position interval between each generated list datum. The actual generated data will depend on the Number Style selected.
- Number Style - A dropdown control providing numbering style options as follows:
    - Decimal - "1."
    - Decimal with Leading Zero - "01."
    - Lowercase Roman - "i."
    - Uppercase Roman - "I."
    - Lowercase Latin - "a."
    - Uppercase Latin - "A."

Range Type and Parameters

Ranges provide increasing sets of numeric values that may repeat in combination with other column types if so defined, based on the following parameters.

- From - An integer value that may be typed or adjusted with arrows, indicating the number at which the range will begin.
- To - An integer value that may be typed or adjusted with arrows, indicating the number at which the range will end.
- Increment - An integer value that may be typed or adjusted with arrows, indicating the interval between range elements between the From and To values.
- Mode - Instructs the generator whether or not to repeat the numeric range values, as follows:
    - Combine - The generator creates a table including all of the possible combinations of the listed values with other column data, based on other column settings.
    - Repeat - The generator repeats the range as many times as will fill the rows generated, based on other column settings.
    - No Repeat - The generator lists each element of the range once in that column. If more rows than values are generated, the extra cells in this column will be left empty.

Fill Value Controls

Fill Value allows you to type a comma-delimited set of text strings that may repeat in combination with other column types if so defined, based on the following parameters.

- Fill Value - A text entry field where you may type your desired values (text strings), with separate elements delimited by commas.
- Mode - Instructs the generator whether or not to repeat the values listed, as follows:
    - Combine - The generator creates a table including all of the possible combinations of the listed values with other column data, based on other column settings.
    - Repeat - The generator repeats the list of values as many times as will fill

the rows generated, based on other column settings.

    - No Repeat - The generator lists each value once in that column. If more rows than values are generated, the extra cells in this column will be left empty.

Table Length Settings

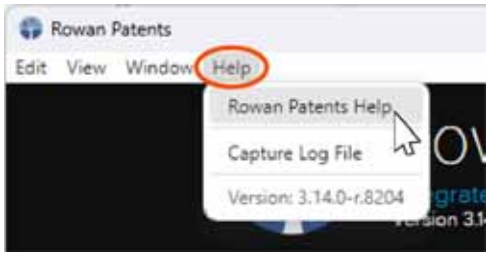
- All Ranges - Instructs the generator to create a table that contains all values generated based on the column parameters, regardless of table length.
- Set Number of Rows - Instructs the generator to limit the length of the table to a number of rows based on a number you type or use the arrows to adjust in the field provided.

Now What?

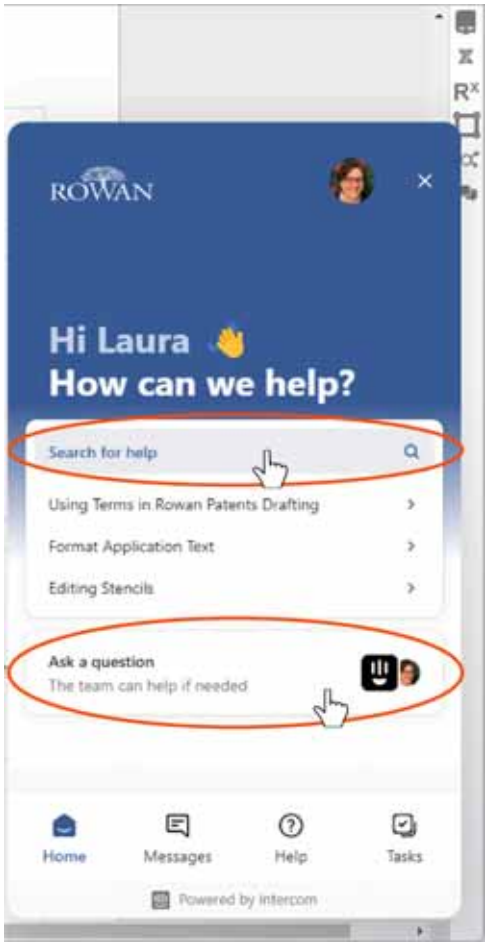
These tables can get rather lengthy rather quickly. To save page space, you may wish to apply multi-column formatting to them once they are generated and part of your specification.

Get Help or Provide Feedback

1. In any Rowan Patents window, select Rowan Patents Help from the Help menu.



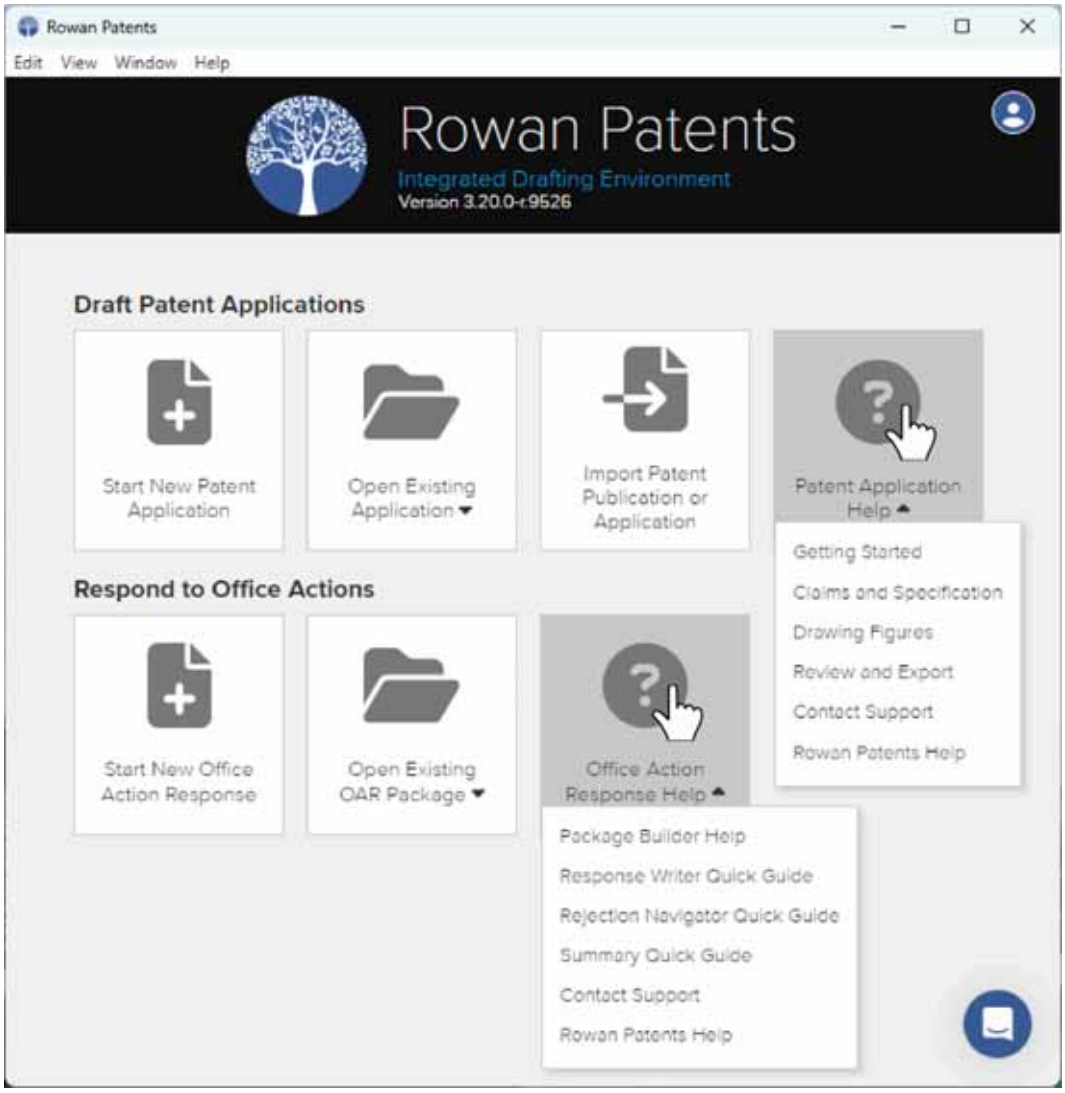
2. Our help interface will open on the right-side of your window.



3. Use this interface to search our library of help articles or speak to our support team to ask questions, provide feedback, or report issues.

Get Help from the Landing Screen

1. In the Rowan Patents landing screen, click on the desired help option, either Patent Application Help or Office Action Response Help.



2. Select from among the options provided, including:

    a. Links to topical article collections in our Intercom Help Center library

    b. Contact Support - send an email to feedback@rowantels.com

    c. Rowan Patents Help - Open the Intercom help interface, as seen above

Contact Rowan Patents, part of Clarivate

We are always happy to speak directly with you to address any questions, feedback, suggestions, or requests you may have. In addition to the steps above, you can reach out to us as follows.

- Provide feedback and request features at feedback@rowantels.com
- Contact our Customer Success Practitioner at steve.kirkwood@clarivate.com
- Request a 15, 30, or 45 minute informational or help session using the links below:
    - https://meet.intercom.com/skirkwood/15min
    - https://meet.intercom.com/skirkwood
    - https://meet.intercom.com/skirkwood/45min

All information in this manual is also available and evergreen in our online help library at

https://intercom.help/rowanpatents/en/collections/1625737