

Rowan Patents Drafting Life and Material Sciences Large Molecule Support

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Accessing Life and Materials Sciences Features

Rowan drafting features supporting patent applications in the fields of life and material sciences, such as chemistry, pharmaceuticals, and biotechnology, are not currently available as part of our general Rowan Patents drafting release, but can be provided to users interested in helping us exercise and improve functionality designed for these fields. If you or your colleagues want to learn more about our life and materials science features and perhaps become beta-testers, please contact Tracy Campbell at tcampbell@rowantels.com.

This document focuses on features we've designed to support these particular fields of invention. Information on Rowan Patents drafting's general functionality is available in the Rowan Patents Drafting Complete User Manual.

Sequence Management

Importing Sequences from a Spreadsheet

1. Collect your sequences in an .xlsx spreadsheet, with short, memorable names in column A and the sequence contents in column B.

A	AutoSave 💽 🗄 🍤	🗸 » MASKE 🔎 Laura Berwick 🎪 🖻 – 🗆 🗙
Fi	le Home Insert Pag	e Lay Formulas Data Review View Help ChemOffi Acrobat 🖄 🖵
A1	2 • : X	✓ <i>f</i> x [∨]
	А	В
1	Lead Antibody 1	Gln Asp Gly Asn Glu Glu Met Gly Gly lle Thr Gln Thr Pro Tyr Lys Val Ser
2	Lead Antibody 2	Asn Tyr Tyr lle His
3	Antibody Trp-lle	Trp lle Tyr Pro Gly Asp Gly Asn Thr Lys Tyr Asn Glu Lys Phe Lys Gly
4	Antibody Asp-Ser	Asp Ser Tyr Ser Asn Tyr Tyr Phe Asp Tyr
5	Antibody Lys-Ser	Lys Ser Ser Gln Ser Leu Leu Asn Ser Arg Thr Arg Lys Asn Tyr Leu Ala
6	Antibody Trp-Ala	Trp Ala Ser Thr Arg Glu Ser
7	Antibody Thr-Gln	Thr Gln Ser Phe lle Leu Arg Thr
8	Antibody His-Trp	His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp lle Gly Trp lle Tyr Pr
0	Antibody Thr Ara	Thr Ara Lve Asn Tvr Leu Ala Trn Tvr Gln Gln Lve Pro Glv Gln Pro Pro L
	Sheet1	(+) : (+)
Rea	idy 💽	III III + 100%

2. Open the Sequence Manager under the Tools menu and select Import Sequences... from the Sequences menu in the Sequence Manager or the Import Sequences button in the Sequence Manager Toolbar.



- * export test.tp tools
 File Edit View Tools \times Import Sequences elect an Excel (.xisx) file with sequence data to imp The data must be in the first sheet in the file. The sheet should have no heade only the sequence data, the first column should contain sequence nicknames, second column the sequence data, and the third qualifier molecule types. Any will be ignored e X 🔳 What is claimed is: | 🔀 📙 🖛 | Chem Bio Demo Fil + Copy 1 Home Share View 0 Item check boxes
 ✓ File name extensi
 ✓ Hidden items Preview pane Stra Details pane Ust Sort by • 1 Small ic EE Details Option Layout × ↑ 📑 > ing Files → Chem Bio Demo Files 5 h Chem Bio A Quick access X≡ Desktop # Х ≡ Documents # Demo Protein and AA_ST25.txt Pictures # Patent Hub 🖈 ☐ _Trademark # ♥ 3 items 1 item selected 10.0 KB 8== 📼
- 3. Drag your sequence spreadsheet onto the import dialog.

4. Review your imported data and confirm or cancel the import.

The	ese sequence	s will be importe	ed:
#	nickname	type	sequence
1	А	protein	Gin Asp Giy Asn Giu Giu Met Giy Giy lie Thr Gin Th
2	В	protein	Gin Asp Giy Asn Giu Giu Met Giy Giy lie Thr Gin Th
3	С	protein	Trp Ala Ser Thr Arg Glu Ser
4	DNA 1	protein	GATTACAACA
5	RNA 1	protein	GAUUACAACA
6	D	protein	Lys Ser Ser Gin Ser Leu Leu Asn Ser Arg Thr Arg L
7	E	protein	Asn Tyr Tyr Ile His
8	DNA 2	genomic DNA	gattacaaca gattacaaca
9	RNA 2	protein	UAGCUAACUC GAGAUCGC
10	Nomme	protein	WIYPGDGNTKYNEKFKG
11	Gnomme	protein	DSYSNYYFDY
12	DeeEnnAyy	protein	ATCGATTGAGCTCTAGCG
13	ArrEnnAyy	genomic DNA	uagcuaacucgagaucgc
			F F
-	Exclude digits	from imported	sequences

> Numbering is automatically assigned for use in SEQ ID NO labels.

Importing Sequences from an ST.25 Text File

1. Open the Sequence Manager under the Tools menu and select Import Sequences... from the Sequences menu in the Sequence Manager.

Ocument 1.tp											
File Edit View	Tools Specification Drawin	ngs Terms Revie	w Win	dow H	lelp						
+ Add 🔻 🕤	Drawing Tool	I⊻÷×	1 X ¹	#_			e (ΩΣτ⊞	•	Generate	· *
	Terms Manager	FONIT			PARAGRA	PH		INSERT		CLAIMS	
_	Sequences Manager										
Title	R-groups Manager	Title									
Docket Nur	My Profanity Lists	The	n D	ocumer	it 1.tp - t	ools					
Cross Refer	Consistency Review		File	Edit Vi	ew Too	ls Insert	Format	Sequences	Window	Help	
Background	Templates		Terms	Seque	nces R-	groups M	y Profanity	Add Ne	w Sequence	1	3
Summary	Launch Analytics	Docket ni	+ A	dd 🖌	C	BI	<u>u</u> s	Delete A	All Sequence	25	e
Brief Descri	La sel Velidetiere						FONT				
 Detailed De. 	Local validations							Import	Sequences		
								Export t	o ST.25 Text	: File	

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

Import Sequences

Select an Excel (.xlsx) file with sequence data to import.

The data must be in the first sheet in the file. The sheet should have no header row, only the sequence data, the first column should contain sequence nicknames and the second column the sequence data. Any other columns will be ignored.



The imported sequences will be appended to the end of the existing list of sequences. 3. Paste text into the top field or drag and drop a .txt file into the dialog provided.

Import Sequences			×
Select an ST.25 text file exported from Patentin c import sequences.	or WIPO Se	quence or paste text to	
			le le
Select or drop your 1	file here		
Select File			
	Cancel	Import sequences	

4. Click the Import sequences button.

Adding an Individual Sequence

1. To add an individual sequence, open the Sequences Manager, and click the +Add button..

Add Sequence		
Nickname		
genome 1		
Violecule type		
Amino Acid DNA		
	\bigcirc	
Qualifier molecule type		
DNA		
genomic DNA		
genomic DNA		
other DNA		
unassigned DNA		
		Canaal
		Cancel Save

2. Enter a nickname for the sequence.

- 3. Select a molecule type and qualifier molecule type from the options provided.
- 4. Click the Save button.
- 5. Type or paste the contents of your sequence into the field provided in the Sequence Manager window.



- 6. Click the flag icon to the upper right to flag and unflag lead sequences.
- Flagging a sequence does not add data to any exported application files, but allows identification of important sequences within Rowan drafting for future reference.

Deleting a Sequence

1. To delete a sequence, click the trash bin icon in the listing to the left.



2. Confirm deletion in the resulting dialog.



Editing a Sequence

1. To edit the sequence nickname, molecule type, and qualifier molecule type, click the pencil icon next to the sequence listing to the right.

uence

2. Make the desired updates in the dialog provided.

Edit Nickname			\times
Nickname			
DeeEnnAvy			
Molecule type Amino Acid DNA Qualifier molecule type	RNA	O DNA/RNA	
genomic RNA			~
genomic RNA mRNA			
rRNA other RNA			
transcribed RNA viral cRNA unassigned RNA			

3. To edit sequence data, edit the text directly in the Sequence Manager field provided.



4. To change the numbering and order of sequences, drag and drop sequences into the desired order in the left-hand listing.

* Document 1.tp - tools		_	
File Edit View Tools Insert Format Sequences	Window Help		
Terms Sequences R-groups My Profanity List Consister	ncy Review Templates		
+ Add '⊃ C' B I 型 S X₁ X¹			
FONT	PARAGRAPH INSERT		
Sequences			
1 - Lead Antibody 1	1 - Lead Antibody 1	Created: Jul 9, 2021 11:43 📜	
2 - Lead Antibody 2	Gin Asp Giv Asp Giu Giu Met Giv Giv Ile	Thr Gin Thr Pro Tvr I vs Val Ser Ile Ser Giv	
3 - Antibody Trp-lie	Thr Thr Val Ile Leu Thr		
4 - Antibody Asp-Ser			
5 - Antibody Lys-Ser	2 - Lead Antibody 2	Created: Jul 9, 2021 11:43 📜	
6 - Antibody Trp-Ala	Asn Tyr Tyr Ile His		
7 - Antibody Thr-Gln			
8 - Antibody His-Trp	3 - Antibody Trp-Ile	Created: Jul 9, 2021 11:43 📁	
9 - Antibody Thr-Arg	Trp IIe Tyr Pro Gly Asp Gly Asn Thr Lys T	Fyr Asn Glu Lys Phe Lys Gly	
10 - Lead Antibody 3 👘 🧪 🎾			
	4 - Antibody Asp-Ser	Created: Jul 9, 2021 11:43 🛛 💭	
	Asp Ser Tyr Ser Asn Tyr Tyr Phe Asp Tyr	r	

Any changes made to sequence name and numbering will be automatically updated throughout the application where used to reflect your changes. 5. Click the flag icon to the upper right to flag and unflag lead sequences.

* Document 1.tp - tools		- 0	×		
File Edit View Tools Insert Format Sequence	es Window Help				
Terms Sequences R-groups My Profanity List Cons	istency Review Templates				
+Add "⊃ C" B I 型 ⊕ X₁ X¹			: -		
FONT	PARAGRAPH INSERT				
Sequences					
1 - Lead Antibody 1 📁	1 - Lead Antibody 1	Created: Jul 9, 2021 11:43 📜			
2 - Lead Antibody 2	Gin Asn Gly Asn Gly Gly Met Gl	N Giv lie Thr Gin Thr Pro Tvr Lvs Val Ser lie Ser Giv			
3 - Lead Antibody 3 🎽	Thr Thr Val lie Leu Thr				
4 - Antibody Trp-Ile					
5 - Antibody Asp-Ser	2 - Lead Antibody 2	Created: Jul 9, 2021 11:43 📜			
6 - Antibody Lys-Ser	Asn Tyr Tyr lle His				
7 - Antibody Trp-Ala					
8 - Antibody Thr-Gln	3 - Lead Antibody 3	Created: Jul 9, 2021 11:57 📜	_		
9 - Antibody His-Trp	Asp Arg Al				
10 - Antibody Thr-Arg					
	4 - Antibody Trp-lle	Created: Jul 9, 2021 11:43 🏳			
	Trp lle Tyr Pro Gly Asp Gly Asn Thr Lys Tyr Asn Glu Lys Phe Lys Gly				
	5 - Antibody Asp-Ser	Created: Jul 9, 2021 11:43 📁			
	Asp Ser Tyr Ser Asn Tyr Tyr Phe	Asp Tyr			

Flagging a sequence does not add data to any exported application files, but allows identification of important sequences within Rowan drafting for future reference.

Inserting Sequence Information into an Application

Sequence ID labels can be added using a typing shortcut. Type "seq" followed immediately by the sequence number and type space. The entered text will be replaced by the sequence ID tag having the typed number.



Insert a sequence nickname by typing the start of the name and selecting the desired option from the dropdown, or finish typing the nickname, hit space, and the nickname will be tagged.

[0003	3] Ant	\rightarrow	[0003] Antibody <u>Trp</u> -Ile
FIG 1	Antibody Trp-Ile		FIG 1
	Antibody Asp-Ser		
	Antibody Lys-Ser		

> Sequence ID labels are also available in the autocomplete menu.

SEQ ID labels, nicknames, and full sequences can be inserted using the right-hand sidebar.

1. Expand the sequence panel in the right-hand sidebar by clicking the icon on the right side of the drafting window.



2. Click the "SEQ ID" label to insert the label.



3. Click the nickname to insert the nickname.



4. Click the arrow to insert the full sequence.

						Z
		Ц.	🕈 SEQ 1	Lead Antibody 1		RX
ION	Asn Tyr Tyr Ile His	_	Insert	Sequence pdy 2		
SEQ ID NO: 2 Asn Tyr Tyr Ile His		•	SEQ 3	Lead Antibody 3	H	
			SEO 4	Antibody Tro IIa		

Consistency Review

1. Select "Consistency Review" in the Tools menu, and click the Sequences tab.



Last update: August 12, 2022

2. Review presence of sequences in claims and spec as needed.

* Document 1.tp - tools			-	
Edit View Tools Window Help				
ms Sequences R-groups My Profanity List Consistence	y Review Templates			
Terms (0 Warnings) Sequences (17 Warnings)	R-Groups (22 Warnings)	Part Names (0 Warnings)		
SEQ ID NO 🔻	Claims	Specification		
1 – Lead Antibody 1	0	0		
2 – Lead Antibody 2	0	1		1
3 – Lead Antibody 3	2	0		1
4 – Antibody Trp-lle	0	0		

Export to ST.25 or ST.26 Format

ROWAN PATENTS DOES NOT INTEND TO PRODUCE A SEQUENCE LISTING THAT IS READY-TO-FILE WITH THE USPTO. OUR EXPORTED FILE SHOULD BE IMPORTED INTO THE PATENT IN TOOL TO PREPARE A READY-TO-FILE LISTING.

- 1. Select the Sequences Manager from the Tools menu.
- 2. Select "Export to ST.25/ST.26" from the Sequences menu.

🌍 * export test.tp - tools		– 🗆 X
File Edit View Tools Insert Format	Sequences Window Help	
Terms Sequences R-groups Compounds	Add New Sequence	es Claim Tree
+ Add ') C' B I 빈 등	Convert Selection to Subsequence	Ω Σ 👻 😹 📑 🗊 Convert 🕶
FONT	Delete All Sequences	NSERT SEQUENCES
Sequences		-
	Convert Sequences to 1-letter Codes	
1 - A	Convert Sequences to 3-letter Codes	Created: Jul 19, 2022 15:31
2 - B	Import Sequences	Giv Giv Ile Thr Gin Thr Pro Tyr Lys Val Ser Ile Ser Ala
3 - C	Export to ST.25/ST.26	
4 - DNA 1	2 - B (protein)	Created: Jul 19, 2022 15:31
5 - RNA 1	Gin Asn Giv Asn Giu Giu Mi	at Gly Gly Illa Thr Gla Thr Pro Tyr Lys Val Sar Illa Sar Gly
6 - D	Thr Thr	st ory ory ne thi on thi tho ty by varset ne ser ory
7 - E		
8 - DNA 2	3-C (protein)	Created: Jul 19, 2022 15:31
9 - RNA 2	Trp Ala Ser Thr Arg Glu Ser	
10 - Nomme		
11 - Gnomme	4 - DNA 1 (nucleotide)	Created: Jul 19, 2022 15:31
12 - DeeEnnAyy	GATTACAACA	
13 - ArrEnnAyy		
	5 - RNA 1 (nucleotide)	Created: Jul 19, 2022 15:31
	GAUUACAACA	
	6 - D (protein)	Created: Jul 19, 2022 15:31
	4	

- 3. Click the desired button for Export to ST.25 or Export to ST.26 in the warning window and save your file in the dialog provided.
- The warning window provides a notice similar to that at the top of this section, and the default filing name includes "Not for Filing" or similar text. We recommend when naming this file you preserve this warning to prevent mistakes at time of filing.

Ranges and Combinations

Inserting Number Ranges

1. Select "Insert" and "Range..." from the Specification menu in the main drafting window.



2. Enter the desired parameters. Click Generate to view a preview. Click Insert to place the range(s) created at your cursor location.

Item		Reference ID No	
protein		SEQ ID NO: 2	
Sequence From	Sequence To	Increment	
70	90	5	00
90	100	2	00
Prefix for Number at least	Suffix for Number	Separator	
Preview		Genera	ie I
The protein describ present invention is 70%, at least 75%, a 92%, at least 94%, a similarity with SEQ	eed herein and used in th s in one embodiment a p at least 80%, at least 85% at least 96%, at least 98% ID NO: 2.	e methods of the otein having at least , at least 90%, at least , and at least 100%	۳ <u>)</u>
Hint: To edit the boiler	plate text go to the menu "	Tool/Templates" or click her	e.

- > The text generated for preview can be directly edited in the preview field if desired before inserting.
 - 3. To modify the template used to construct the text containing the ranges you create, select "Templates" from the Tools menu.



4. Scroll down to the Range section (or click the Range listing in the left-hand sidebar), and make the desired changes to your template.



- Modified template text will be stored as part of your user set up. Changes made in one application will be reflected across newly inserted ranges in all applications.
- > Ranges that have already been inserted will not be updated by template changes.

Inserting Combinations of Items

1. To create and insert a set of combinations of items, select "Insert" and "Combination..." from the Specification menu in the main drafting window.

🌍 * Document 1.tp		
File Edit View Tools	Specification Drawings Terms Review	ew Window Help
+ Add ▼ 5 C	New Independent Claim	Image
	New Dependent Claim	Special Characters
	Duplicate Claims	Inline Equation
Title	Delete Claims	Inline Chemistry
Docket Number	Generate from Selected Claims 🕨	Standalone Equation
Cross Reference	Auto-Indent Claims	Standalone Chemistry
Background	Generate Figure Description	Definition for Term
Summary	Renumber Parts	Parts List
Brief Description of		Claims
 Detailed Descripti 	Insert 🕨	Range
	Format 🕨	Combination
Introduction		

2. Include a subject comprising the combined items, include a list of items, define the parameters of your desired combinations, and click Generate to see a text preview.

Subject	
invented compound	
Enter or paste a list of items, on	e per line.
Items	must include
Item A	
Item B	
Item C	
Item D	
Item E	
Itom F	
Combination Size (select one o	r more)
1 2 2 4 5 6 7	

3. Review your text preview, and click Insert to place the generated text at your cursor location.

Insert Combination		×
Subject		
invented compound		1
Enter or paste a list of items, one per line.		
Items	must include	
Item A		
Item B		
Item C		
Item D		
Item E		
Itom F	•	
Preview	Generat	
The invented compound may comprise at least one of It ltem D, Item E, Item F, Item G. In one embodiment, the in includes Item A, Item B, Item C, Item D, Item E. In one em invented compound includes Item A, Item B, Item C, Item embodiment, the invented compound includes Item A, It Item G. In one embodiment, the invented compound incl Item D, Item E, Item F. In one embodiment, the invented Item A, Item C, Item D, Item E, Item G. In one embodimer compound includes Item A, Item C, Item D, Item F, Item C embodiment, the invented compound includes Item B, It Item F. In one embodiment, the invented compound Item D, Item E, Item G. In one embodiment, the invented Item D, Item E, Item G. In one embodiment, the invented Item D, Item E, Item G. In one embodiment, the invented Item B, Item C, Item D, Item F, Item G. In one embodiment compound includes Item C, Item D, Item F, Item G.	em A, Item B, Item C, vented compound abodiment, the a D, Item F. In one em B, Item C, Item D, ludes Item A, Item C, compound includes at, the invented B. In one em C, Item D, Item E, udes Item B, Item C, compound includes at, the invented b.	
Hint: To edit the boilerplate text go to the menu "Tool/Tem	plates" or click <mark>here</mark> .	
	Cancel Insert	

4. To modify the template used to construct the text containing the combinations you create, select "Templates" from the Tools menu.



5. Scroll down to the Combination section (or click the Combination listing in the left-hand sidebar), and make the desired changes to your template.



- Modified template text will be stored as part of your user set up. Changes made in one application will be reflected across newly inserted combinations in all applications.
- > Combinations that have already been inserted will not be updated by template changes.

Support and Feedback

You can use our in-tool Help interface to search or browse our support articles or contact us with questions and feedback.

1. Click on the Help menu item and select Rowan Patents Help...



2. This invokes a panel in which you can send us a message, or search for answers in our support articles.



Several Rowan product team members monitor the chat and will respond at least by the next business day, and typically within a couple of hours.