

INTERDICTionary™

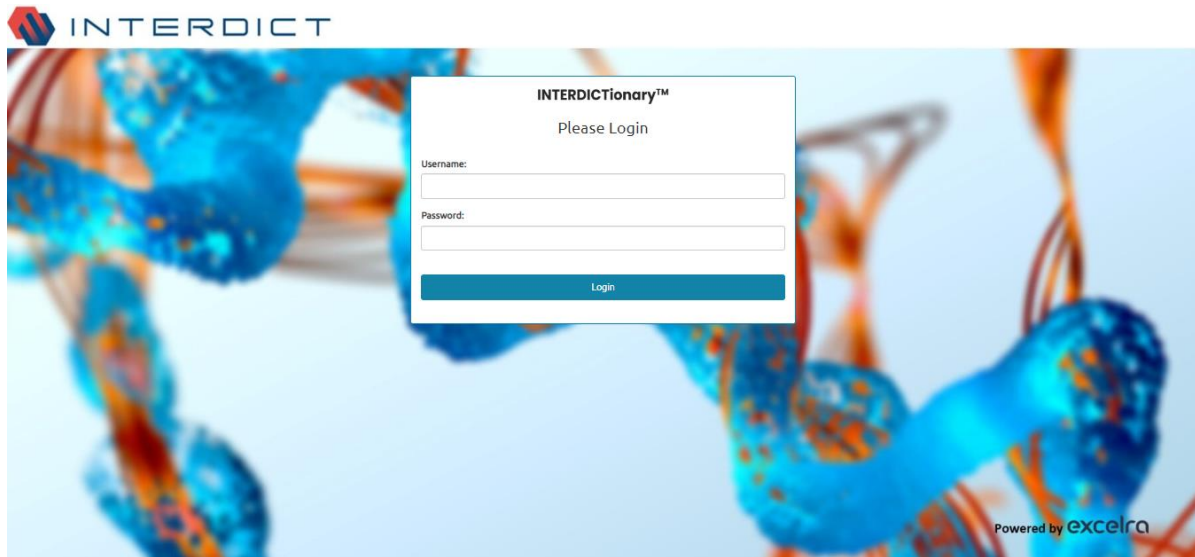
User Manual

Version 1.0

Contents

1. Query.....	2
2. Input box.....	3
3. Filter by sequence	3
4. Find overlap.....	3
5. UniProt	3
6. Results Summary.....	3
7. Selected Data.....	4
8. Dashboard.....	5
9. Admin	6
10. Refine your Search.....	7
11. Additional Features	7
12. Global Search.....	8
13. Upload 6-mer data.....	8
14. Help.....	8

Accessing the INTERDICTIONary Application



URL: <https://interdictionary.excelra.net/>

Home page after logging in

INTERDICTIONary™

Choose Regex or Normal

Normal

Regex

Enter the sequences

AAAA

Multiple sequences should be comma separated with no spaces. (E.g. AAAA,AAAT)

Filter by Sequence(s)

Find overlaps

UniProt

Results Summary

Selected Data

Dashboard

Admin

Upload 6-mer data

Help

Refine your search

Add Filter Condition

Column visibility

Copy

Print

Download current page

Download all data

Search:

Showing 1 to 7 of 3,019 entries

EntryName	Entry	ProteinName	GeneNames	Organism	Length	Sequence	Position_List
HXA13_HUMAN	P31271	Homeobox protein Hox-A13 (Homeobox protein Hox-1J)	HOXA13 HOX1J	Homo sapiens (Human)	388	AAAA	38,39,40,41,42,43,44,45,46,47,48,62,63,73,74,75,76,77,78,79,80,81
SOX21_HUMAN	Q9Y651	Transcription factor SOX-21 (SOX-A)	SOX21 SOX25 SOXA	Homo sapiens (Human)	276	AAAA	137,138,139,140,141,142,143,154,155,156,157,158,159,160,161,162
RBM24_HUMAN	Q9BX46	RNA-binding protein 24 (RNA-binding motif protein 24) (RNA-binding region-	RBM24 RNPC6	Homo sapiens (Human)	236	AAAA	141,162,163,164,165,166,167,168,169,209,210,211,212,213,214,215

The image above shows the view post signing-in to the application. The details on the buttons 8(tagged with numbers) can be referred below:

1. Query

a. Normal

User can enter the n number of sequences with comma separated.

- E.g. AAAA, AANA, AACA

b. Regex

In order to search manually for multiple sequences in a single search, the application also provides an option to perform Regex-based search. Through this, user can obtain results in a single click. The user has to make sure that he is not clubbing multiple different sequences separated by comma.

E.g. **`^PP[G,A,V].T$`**

The above query would search the results for all sequences starting with P, having P at 2nd position, having either G or A or V at 3rd position & ending with T.

2. Input box

The box facilitates the user to enter peptide sequence of interest. He has to make sure that they are either 4/5 amino acids long else warning would be flashed as the application houses only 4/5 length sequences results.

3. Filter by sequence

Once, entering sequences in the input box, user has to click Filter by sequence(s) button to direct the application to show results.

4. Find overlap

User can click on this action button to find the overlapping results (based on Entry) in case he wants to query multiple sequences. This will generate 2 more tables in same page if the overlap exist. "Overlapped Entries for Sequences" show Entries where multiple sequences exist. "Detailed data for Overlapped Entries" will show all the data for multiple overlapping Entries.

5. UniProt

User can click on this UniProt logo, it redirects to UniProt website
<https://www.uniprot.org/id-mapping>

Tab description

In this application there are 4-tab panels

6. Results Summary

Shows the filtered data which is generated using query. The rows are clickable & allows the user to see detailed results in the *Selected Data* Tab.

Query to filter data

Filtered data

INTERDICTIONary™

Choose Regex or Normal

Normal

Regex

Enter the sequences

AANA, AAMA, AACA

Multiple sequences should be comma separated with no spaces. (E.g. AAAAA,AAAT)

Filter by Sequence(s)

Find overlaps

UniProt

Results Summary Selected Data Dashboard Admin Upload 6-mer data Help

Refine your search

Add Filter Condition

Column visibility Copy Print Download current page Download all data

Search:

Showing 1 to 7 of 910 entries

EntryName	Entry	ProteinName	GeneNames	Organism	Length	Sequence	Position_List	Count
RIPP1_HUMAN	Q0D2K3-2	Protein ripply1	RIPPLY1	Homo sapiens (Human)	104	AACA	4	1
RIPP2_HUMAN	Q5TAB7	Protein ripply2	RIPPLY2 C6orf159	Homo sapiens (Human)	128	AACA	15	1
RIPP1_HUMAN	Q0D2K3	Protein ripply1	RIPPLY1	Homo sapiens (Human)	151	AACA	4	1
CL16A_HUMAN	Q2KHT3-3	Protein CLEC16A (C-type lectin domain family 16 member A)	CLEC16A KIAA0350	Homo sapiens (Human)	140	AACA	129	1
CK037_HUMAN	Q96N53	Putative uncharacterized protein encoded by LINC00167 (PRDM10-DT divergent transcript)	PRDM10-DT C11orf37 LINC00167 NCRNA00167	Homo sapiens (Human)	147	AACA	69	1

7. Selected Data

- Shows the selected rows which are selected from **Results Summary**, for this user must click on the **Extract Data**

Selected data

INTERDICTIONary™

Choose Regex or Normal

Normal

Regex

Enter the sequences

AANA, AAMA, AACA

Multiple sequences should be comma separated with no spaces. (E.g. AAAAA,AAAT)

Filter by Sequence(s)

Find overlaps

UniProt

Results Summary Selected Data Dashboard Admin Upload 6-mer data Help

Refine your search

Add Filter Condition

Column visibility Copy Print Download current page Download all data

Search:

Showing 1 to 7 of 910 entries

EntryName	Entry	ProteinName	GeneNames	Organism	Length	Sequence	Position_List	Count
RIPP1_HUMAN	Q0D2K3-2	Protein ripply1	RIPPLY1	Homo sapiens (Human)	104	AACA	4	1
RIPP2_HUMAN	Q5TAB7	Protein ripply2	RIPPLY2 C6orf159	Homo sapiens (Human)	128	AACA	15	1
RIPP1_HUMAN	Q0D2K3	Protein ripply1	RIPPLY1	Homo sapiens (Human)	151	AACA	4	1
CL16A_HUMAN	Q2KHT3-3	Protein CLEC16A (C-type lectin domain family 16 member A)	CLEC16A KIAA0350	Homo sapiens (Human)	140	AACA	129	1
CK037_HUMAN	Q96N53	Putative uncharacterized protein encoded by LINC00167 (PRDM10-DT divergent transcript)	PRDM10-DT C11orf37 LINC00167 NCRNA00167	Homo sapiens (Human)	147	AACA	69	1

- Go to **Selected Data** tab-panel and click on **Extract Data** button then user can see the data like below

INTERDICTIONary™

User Exit

Results Summary Selected Data Dashboard Admin Upload 6-mer data Help

Enter Column Name

Create Bins

Done

Refine your search

Add Filter Condition

Column visibility Copy Print Download current page Download all data

Search:

Showing 1 to 2 of 2 entries

EntryName	Entry	ProteinName	GeneNames	Organism	Length	Sequence	Position	Count
RIPP1_HUMAN	Q0D2K3-2	Protein ripply1	RIPPLY1	Homo sapiens (Human)	104	AACA	4	1
CL16A_HUMAN	Q2KHT3-3	Protein CLEC16A (C-type lectin domain family 16 member A)	CLEC16A KIAA0350	Homo sapiens (Human)	140	AACA	129	1

Show 7 entries

Previous 1 Next

Extract Data

8. Dashboard

- Dashboard shows list of top 100 maximum occurring sequences
- It also shows list of top 100 least occurring sequences.
- Dashboard will generate the plots and summary counts based on filtered data
 - Summary counts will be displayed automatically
 - To generate the plots user must click on the Generate Plots button
- Dashboard will be changed dynamically after changed the query in Results Summary

INTERDICTIONary™

Help User Exit

Results Summary Selected Data Dashboard Admin

908 Entries

483 Genes

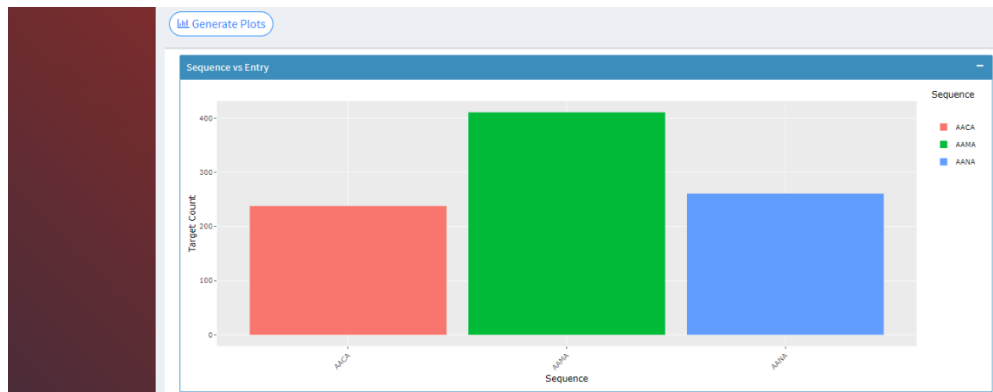
3 Sequence

Generate Plots

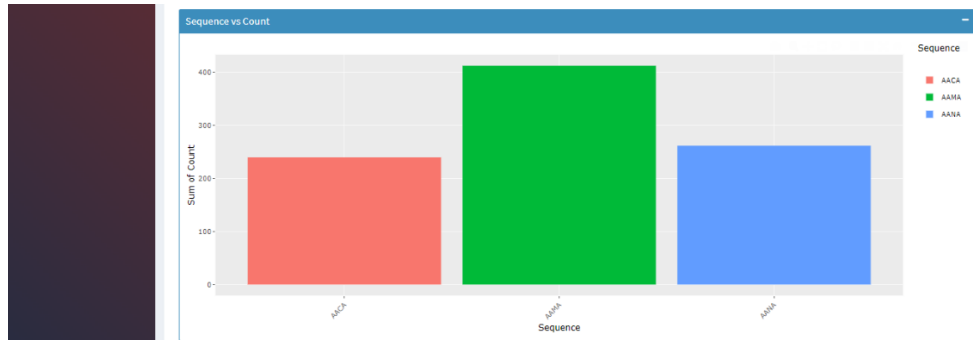
Click this action button to generate the plots

Summary Count from which is generated from filtered data which is displaying in Results Summary

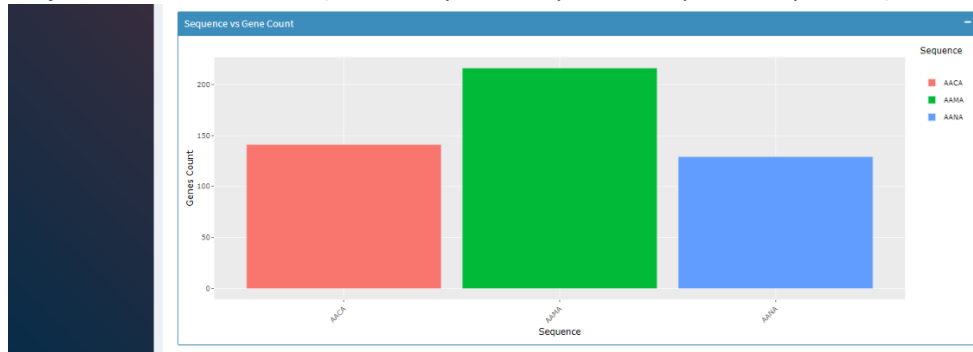
Sequence vs Entry (In how many Entries the queried sequence is present)



Sequence vs Count (frequency of sequence occurring)

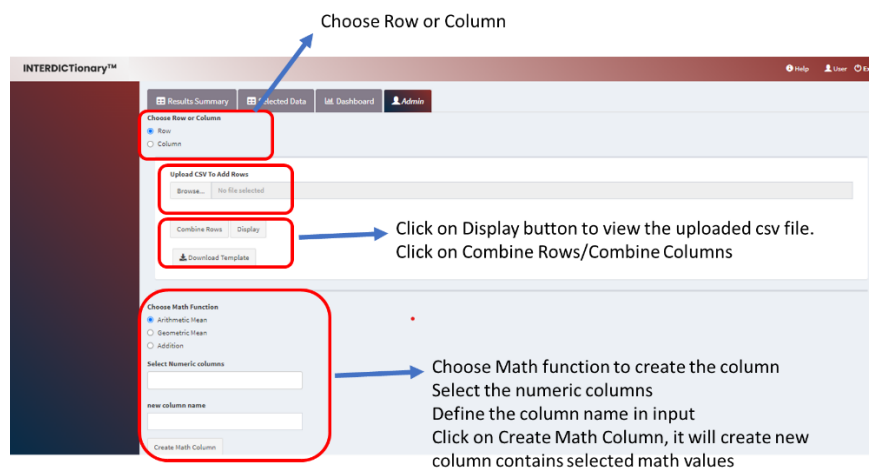


Sequence vs Gene Count (How many Genes, queried sequence is present)



9. Admin

- Admin tab-panel will be accessible only by admin
- Admin panel will contain multiple options to manipulate the data which is presented in *Selected Data* tab-panel



i. Add Row

1. Download the template and add data to be appended to the template and upload it by clicking on the Combine Rows button
2. Results will be displayed in the *Selected Data* tab-panel

ii. Add Column

1. Download the template and add newer data to the template and upload it by clicking on the Combine Column button
2. Results will be displayed in the *Selected Data* tab-panel

iii. Add Match Column

1. Choose Math Function
 - a. Arithmetic Mean
 - i. Will calculate Arithmetic Mean of two or more columns and creates the new column
 - b. Geometric Mean
 - i. Will calculate Geometric Mean of two or more columns and creates the new column
 - c. Addition
 - i. Will calculate summation of two or more columns and creates the new column
2. New column name should be mentioned in the input box by the user.
3. Manipulated data will be displayed in the *Selected Data* tab-panel

10. Refine your Search

- This option allows to place sequential filters on the data generated by input sequence. The user can place filters on either or multiple columns & get to see the desired output.

11. Additional Features

- *Column Visibility*: Allows the user to show/hide columns
- *Copy*: Allows the user to copy & place the data onto Clipboard

- *Print*: Allows the user to Print the data shown in the table
- *Download Current Page*: Allows the user to download the data shown in table on the current page
- *Download All data*: Allows the user to download entire data generated because of input sequence

12.Global Search

- Allows the user to search keyword in the entire table

13.Upload 6-mer data

- Allows the user to temporarily (Session-dependent) load data, place filters & run quick visual analysis on the sequences with 6 residues length.

14.Help

- Dedicated Tab holding Manual on using the application.