

GeneAPIChat Test Case-1: STRING API

Explore external websites related to genetic data and information

Your question or command:

protein interaction

Submit

STRING API

Query me: (one human protein or multiple space separated proteins)

TREM2 SORL1 APOC1 APOE

Let's go!

Network:

(iii) User enters the protein or protein names separated by space

(iv) Seed proteins (nodes) colored

(v) if no interaction found, selects 10 closest neighbors

(vi) Types of evidences are highlighted in different colors

(vii) Hover on nodes (protein names) for more info

Evidence Types

- Fusion evidence
- Neighborhood evidence
- Cooccurrence evidence
- Experimental evidence
- Textmining evidence
- Database evidence
- Coexpression evidence

GeneAPIChat Test Case-2: Enrichr API

Explore external websites related to genetic data and information

Your question or command:

enrich

Submit

Upload your gene list

Drag and drop file here
Limit 200MB per file

Browse files

showtop10genesAlzheimerdistinct.csv 509.0B

Choose gene set libraries

GO_Biological_P... x KEGG_2019_Hu... x WikiPathways_2... x

Enrich

Enrichment analysis results saved to test_results\enrichment_results_multiplegenesets.csv

☐ Do you want to visualize the enrichment results?

(iii) Choose from the available gene set reference libraries (for now, only 2 provided): either one or more at a time

(iv) Enrichment analysis results automatically saved in directory under rootdirectory/test_results as a csv file

..Contd..

Home
PGSChat
GeneAPIChat
LiteratureSearch
Settings

Explore external websites related to genetic data and information

Your question or command: enrich

Upload your gene list
Drag and drop file here
Limit 200MB per file

(i) User prompt: keywords like enrich, enrichment, analysis, pathway or fully formed questions with these keywords calls ENRICHR API (to perform gene set enrichment analysis)

(ii) Upload any custom gene list, e.g. saved csv file with top 10 genes for Alzheimer's

Open

PostDocUTHH > GENEVIIC > GENEVIIC_V2 > test_results

Search test_results

	Date modified	Type	Size
enrichment_results_multiplegenesets	1/25/2024 1:45 AM	Microsoft Excel Com...	4
enrichment_results_WikiPathways_2019_Human	1/15/2024 4:23 AM	Microsoft Excel Com...	
enrichment_top10genesAlzheimer	1/23/2024 3:37 PM	PNG File	5
enrichmentplot	1/24/2024 11:48 PM	PNG File	8
evaluate_pgschat_retirevedb_showtop10genesA...	1/23/2024 3:24 PM	Microsoft Excel Com...	
plottop5frequentgenesAlzheimer	1/23/2024 3:28 PM	PNG File	1
showtop10genesAlzheimerdistinct	1/24/2024 11:39 PM	Microsoft Excel Com...	

File name: showtop10genesAlzheimerdistinct All Files

Open Cancel

..Contd..

enrichment_results_multiplegenesets.csv 43.4KB

Choose type of visualization
Network Graph

Enter p-value cutoff
0.05

Visualize Enrichment

(v) Upload the saved csv file with the enriched gene sets results for visualization

(vi) Choose type of visualization: Network Graph

(vii) Enter the cutoff p-value more, enrichment more than that value is omitted

(ix) Visualize the enrichment results

API

Azure