

User Guide

Catalogue

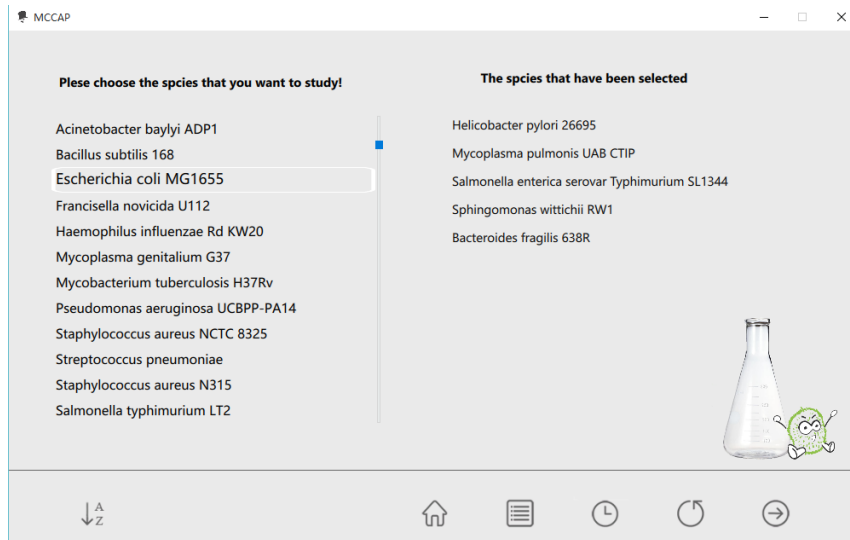
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Main window



This is main window of MCCAP, and only two buttons on it. Click on the “start” button to start using it. If you are using for the first time, you can click on the “help” button beside.

Choosing reference species



Click on “start” and then we come into a window which is used to choose reference species. You can choose species by pulling them to right side or double clicking them.

Main buttons



There are six buttons on the bottom. From left to right are sort, home, save, history, reset and next.

What we need to explain are “save” and “history”.



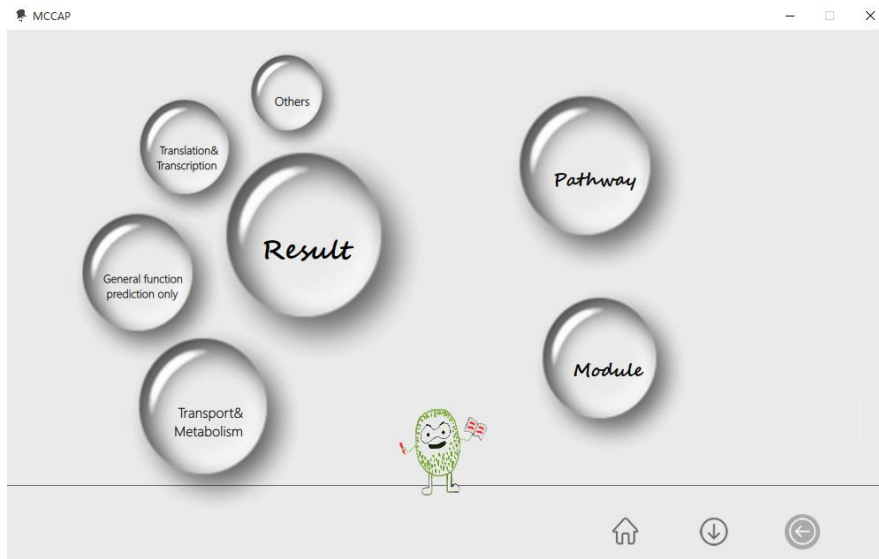
You can save the current reference species by save button.



And then check them by history.

These two buttons are used for comparison of two minimal gene set.

Viewing minimal gene set



Let us click on next. What appears in front of us is the result of minimal gene set and corresponding gene network.

Cluster of Essential Gene	Description
CEG0001	Ile-tRNA synthetase
CEG0002	ribosomal protein L5 (BL6)
CEG0003	glutamyl-tRNA synthetase
CEG0004	phenylalanyl-tRNA synthetase (alpha subunit)
CEG0005	DNA-directed RNA polymerase subunit beta
CEG0006	ribosomal protein L4
CEG0007	ribosomal protein S3 (BS3)
CEG0008	ribosomal protein L6 (BL8)
CEG0009	ribosomal protein S5
CEG0010	ribosomal protein L13

Click one of categories to view the minimal gene set.

Corresponding Gene

GID: 255767024

GID: 15926223

GID: 15640386

GID: 16272525

GID: 12044939

ATGGGTACAATAGCGCAATTAATTAGAAAAACACGCCAAAAAAGAAGTTAAATCAAA
GTACACCTGCACTCCATTATAACCTCAACCTTTTAAACAAAAAACTACCAATGTTTACT
CACCCTAAAGCGTGGTGTGGCACCAGGTTGGCACCATGACCCCGAGAAACCTA
ATTCTGCACTAAGAAAGTATGCTAAGGTTAGACTTACAAATGGCTTTGAAGTACTTGC
Gene Name **Description** **Compatible Assembly Standard**
rpsL ribosomal protein S12 ["RFC10","RFC12","RFC23","RFC25"]

GID: 15645811

GID: 15607822

Cluster Information

Access_num: CEG0022

Gene Number: 22

Description: 30S ribosomal protein S12

Biobrick Content

View All

GID	BBK Name	Protein
null		

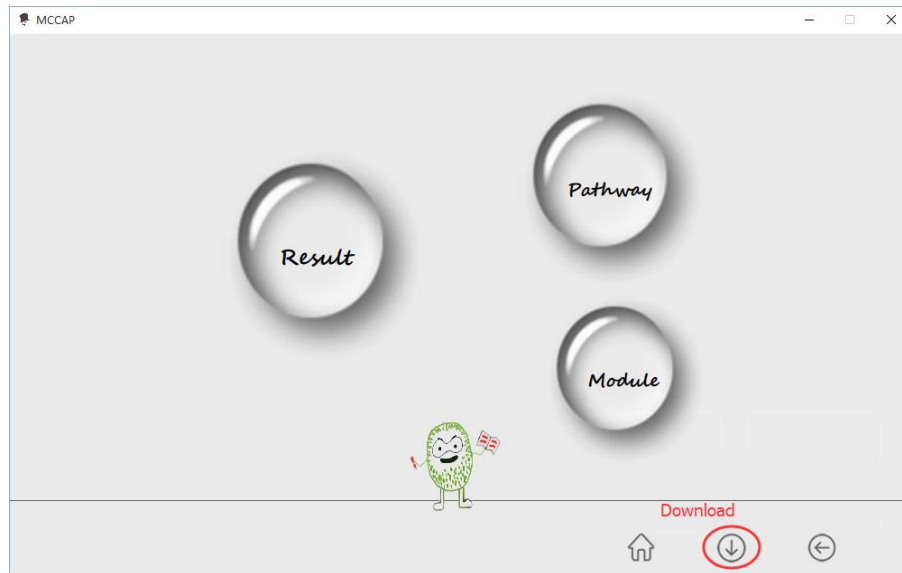
Click one of gene cluster to see detailed information. Left side is list of genes, and right side is base information of gene cluster and corresponding biobricks.

All Matching Biobrick

Gid	Biobrick Name	Protein
15640909	BBa_K777117	MotB
16272478	BBa_C0083	AspA
16272478	BBa_K1342002	AspA
30995398	BBa_K864201	LexA
16765051	BBa_T9150	PyrF
50085432	BBa_T9150	PyrF
29144405	BBa_K864201	LexA
16129242	BBa_T9150	PyrF
16129842	BBa_K777113	MotA
16131869	BBa_K864201	LexA
83719273	BBa_K864201	LexA
345462012	BBa_K864201	LexA
378450526	BBa_C0024	CheB
15598072	BBa_T9150	PyrF
15600622	BBa_C0083	AspA
15600622	BBa_K1342002	AspA
378702081	BBa_K864201	LexA

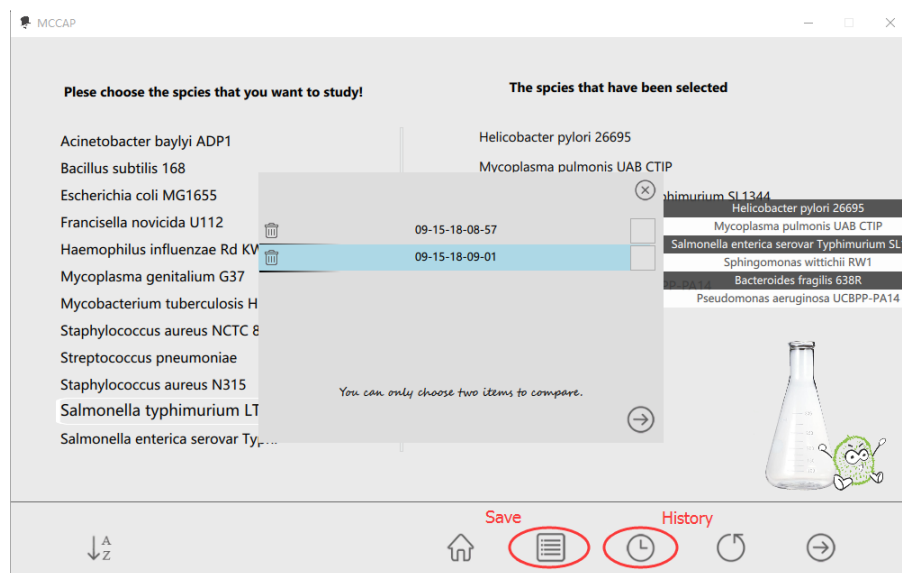
Click “view all” to see all biobricks which corresponding genes are included in our database.

Download minimal gene set



Click download button to download the result of minimal gene set.

Comparing two minimal gene set

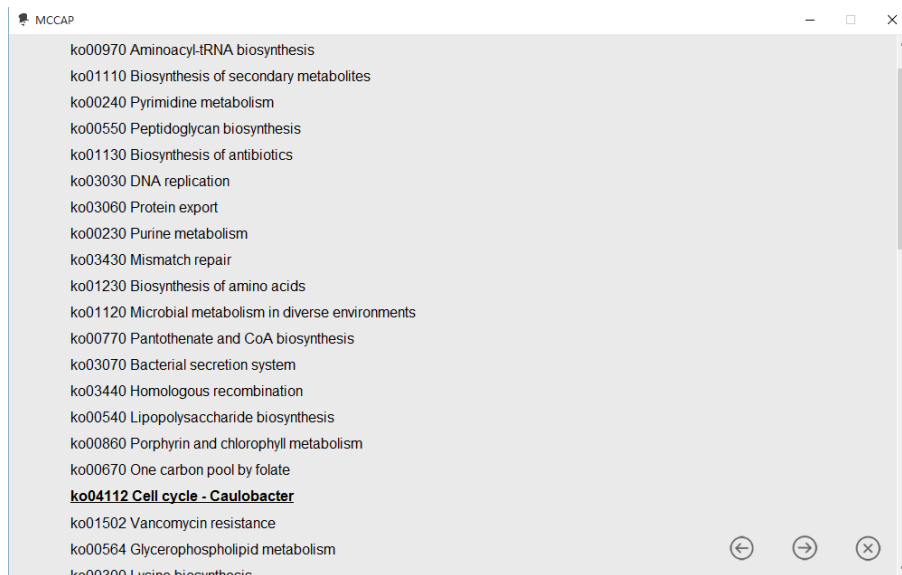


Save at least two sets of reference species, then you can check them by clicking “history” button. Select two of them, and click on the arrows to view the result.

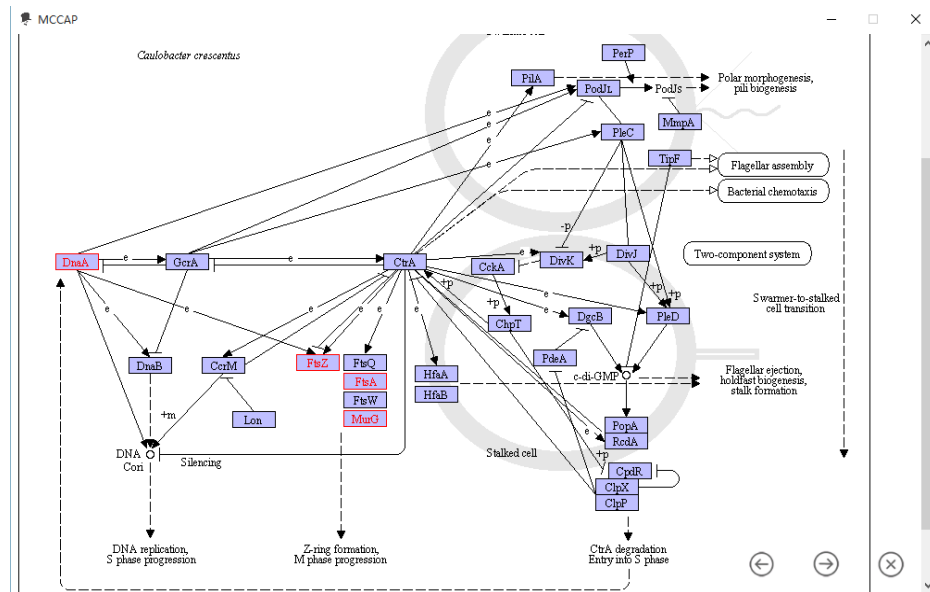
Viewing gene network diagram



You can click on the “pathway” or “module” to view corresponding gene network diagram.



Then there is a list of gene network diagram.



Each gene in minimal gene set has been marked with red color.