

# BV-BRC Test Report

## D17. Interactions Data Tab

<b>Item to test</b>	<b>Interactions Data Tab</b>
<b>URL</b>	<a href="https://www.bv-brc.org/view/Taxonomy/209#view_tab=interactions">https://www.bv-brc.org/view/Taxonomy/209#view_tab=interactions</a>
<b>Prerequisites</b>	None
<b>References</b>	<a href="https://www.bv-brc.org/docs/quick_references/organisms_taxon/interactions.html">https://www.bv-brc.org/docs/quick_references/organisms_taxon/interactions.html</a>
<b>Tester(s)</b>	Rebecca Wattam, Ron Kenyon
<b>Test date</b>	6-Jan-2022 (original – passed), 9-May-2022 (follow-up-passed)
<b>Test result</b>	<b>Passed</b>

### Overview

- Test the Interactions Tab with example bacterial data.
- Test Filters.
- Test Graph View.
- Test Graph functions.

### Test Results

- Test results were verified by examination of returned data via inspection and filters.
- All operations performed as expected.

# Helicobacter:

## Table view:

Taxon View  
 Bacteria » Proteobacteria » Epsilonproteobacteria » Campylobacterales » Helicobacteraceae » **Helicobacter** (3037 Genomes)

Overview | Phylogeny | Taxonomy | Genomes | AMR Phenotypes | Sequences | Proteins | Protein Structures | Speciality Genes | Domains and Motifs | Epitopes | Pathways | Subsystems | Experiments | **Interactions**

Table | Graph

DOWNLOAD | KEYWORDS | ADV Search | experimental | EVIDENCE x | HIDE

Category	Evidence	Detection Method	Interaction Type	Source Db	Genome Name A	Genome Name B
HPI (1)	computational (211791)	3 hybrid method (1)	association (157)	bind (8)	Helicobacter acinonychis str. Sheeba (241)	Helicobacter acinonychis str. Sheeba (2)
PPI (29126)	<b>experimental (29127)</b>	adenylate cyclase complementation (1)	direct interaction (4)	biocyc (155)	Helicobacter bizzozeronii CIII-1 (35)	Helicobacter bizzozeronii CIII-1 (35)
		affinity chromatography technology (10)	physical association (1538)	dip (796)	Helicobacter hepaticus ATCC 51449 (717)	Helicobacter hepaticus ATCC 51449 (71)
		anti bait coimmunoprecipitation (1)	physical interaction (790)	gene ontology (11)	Helicobacter mustelae 12198 (3609)	Helicobacter mustelae 12198 (3609)
		cosedimentation (1)	predicted interaction (27380)	intact (677)	Helicobacter pylori 26695 (15589)	Helicobacter pylori 26695 (15588)
		cross-linking study (1)		kegg pathways (556)	Helicobacter pylori J99 (8931)	Helicobacter pylori J99 (8931)
		domain fusion (104)		mint (959)	Helicobacter pylori SouthAfrica7 (5)	Helicobacter pylori SouthAfrica7 (5)
		experimental interaction detection (157)		mpidb (29)		Homo sapiens (1)
		gene neighbourhood (1674)		string (27377)		
		inference (527)				

<input type="checkbox"/>	Interactor A	Gene A	Desc A	Interactor B	Gene B	Desc B	Category	Interaction Type	Detection Method	Evidence
<input type="checkbox"/>	fig 85963.7.peg.204	fabI	Enoyl-acyl-carrier-protein	fig 85963.7.peg.926	hopB	Outer membrane protein/px	PPI	predicted interaction	predictive text mining	experimental
<input type="checkbox"/>	fig 85962.8.peg.644		Chemotaxis protein CheV (	fig 85962.8.peg.1429		Two-component system se	PPI	predicted interaction	predictive text mining,interc	experimental,computational
<input type="checkbox"/>	fig 679897.3.peg.1180	surE	5'-nucleotidase SurE (EC 3	fig 679897.3.peg.1205	secF	Protein translocase subunit	PPI	predicted interaction	predictive text mining	experimental
<input type="checkbox"/>	fig 85962.8.peg.790		N-carbamoylputrescine am	fig 85962.8.peg.1499		Ribonuclease J (endonucle	PPI	predicted interaction	predictive text mining	experimental
<input type="checkbox"/>	fig 85962.8.peg.141		Serine transporter	fig 85962.8.peg.615	oorD	2-oxoglutarate/2-oxoacid fe	PPI	predicted interaction	predictive text mining	experimental
<input type="checkbox"/>	fig 85962.8.peg.226		Phosphatidate cytidyltran	fig 85962.8.peg.1396		hypothetical protein	PPI	predicted interaction	predictive text mining	experimental
<input type="checkbox"/>	fig 85963.7.peg.1217	rpsL	SSU ribosomal protein S12	fig 85963.7.peg.1318	rpsM	SSU ribosomal protein S12	PPI	predicted interaction	predictive text mining,interc	experimental,computational
<input type="checkbox"/>	fig 85962.8.peg.1383		hypothetical protein	fig 85962.8.peg.680	aspA	Aspartate ammonia-lyase (	PPI	physical interaction	two hybrid	experimental
<input type="checkbox"/>	fig 85962.8.peg.1519	rpmH	LSU ribosomal protein L34	fig 85962.8.peg.1578		Uncharacterized protein jh	PPI	predicted interaction	predictive text mining	experimental
<input type="checkbox"/>	fig 85962.8.peg.1270		Polyribonucleotide nucleoti	fig 85962.8.peg.969		6-carboxy-5,6,7,8-tetrahydri	PPI	physical interaction	two hybrid	experimental
<input type="checkbox"/>	fig 85963.7.peg.237		Peptide methionine sulfoxid	fig 85963.7.peg.999		Small-conductance mechai	PPI	predicted interaction	predictive text mining	experimental
<input type="checkbox"/>	fig 85962.8.peg.172		FIG000859: hypothetical pi	fig 85962.8.peg.173		Porphobilinogen synthase (	PPI	predicted interaction	predictive text mining, gene	experimental,computational
<input type="checkbox"/>	fig 85963.7.peg.621	ppa	Inorganic pyrophosphatase	fig 85963.7.peg.995	ftsA	Cell division protein FtsA	PPI	predicted interaction	predictive text mining	experimental
<input type="checkbox"/>	fig 85962.8.peg.58		Proline dehydrogenase (EC	fig 85962.8.peg.808		Guanosine-3',5'-bis(diphos	PPI	physical association	two hybrid	experimental
<input type="checkbox"/>	fig 679897.3.peg.1246	rplF	LSU ribosomal protein L6p	fig 679897.3.peg.1259	rplW	LSU ribosomal protein L23	PPI	predicted interaction	predictive text mining,interc	experimental,computational
<input type="checkbox"/>	fig 85963.7.peg.312	flgL	Flagellar hook-associated (	fig 85963.7.peg.1552	rocF	Arginase (EC 3.5.3.1)	PPI	predicted interaction	predictive text mining	experimental
<input type="checkbox"/>	fig 85963.7.peg.423	rpsO	SSU ribosomal protein S15	fig 85963.7.peg.1340	rplD	LSU ribosomal protein L4p	PPI	predicted interaction	predictive text mining,interc	experimental,computational
<input type="checkbox"/>	fig 85963.7.peg.74	ureE	Urease accessory protein I	fig 85963.7.peg.77	ureA	Urease gamma subunit (EI	PPI	predicted interaction	predictive text mining,interc	experimental,computational
<input type="checkbox"/>	fig 679897.3.peg.94	FrpB2	Iron-regulated outer memb	fig 679897.3.peg.351	tonB2	Ferric siderophore transpoi	PPI	predicted interaction	predictive text mining,interc	experimental,computational
<input type="checkbox"/>	fig 85962.8.peg.132	infC	Translation initiation factor	fig 85962.8.peg.229		Phospholipid-binding prote	PPI	predicted interaction	predictive text mining	experimental
<input type="checkbox"/>	fig 85962.8.peg.1346		Protein yoeI precursor	fig 85962.8.peg.1403		Ferric siderophore transpoi	PPI	predicted interaction	predictive text mining	experimental
<input type="checkbox"/>	fig 679897.3.peg.1066	gyrA	DNA gyrase subunit A (EC	fig 679897.3.peg.1196	argF	Ornithine carbamoyltransfe	PPI	predicted interaction	predictive text mining,interc	experimental,computational
<input type="checkbox"/>	fig 85963.7.peg.44		GDP-L-fucose synthetase (	fig 85963.7.peg.1016		hypothetical protein	PPI	predicted interaction	predictive text mining	experimental
<input type="checkbox"/>	fig 85963.7.peg.1316	rpsD	SSU ribosomal protein S4p	fig 85963.7.peg.1452	ppiA	Peptidyl-prolyl cis-trans iso	PPI	predicted interaction	predictive text mining	experimental
<input type="checkbox"/>	fig 85962.8.peg.312		Dipeptide transport ATP-bir	fig 85962.8.peg.313		Dipeptide transport ATP-bir	PPI	predicted interaction	inference, predictive text mi	computational, experimen

1 - 200 of 5000 results

< 1 2 3 ... 25 >

# Graph View:

Taxon View  
Bacteria » Proteobacteria » Epsilonproteobacteria » Campylobacteriales » Helicobacteraceae » **Helicobacter** ( 3037 Genomes )

Overview | Phylogeny | Taxonomy | Genomes | AMR Phenotypes | Sequences | Proteins | Protein Structures | Speciality Genes | Domains and Motifs | Epitopes | Pathways | Subsystems | Experiments | **Interactions**

Table | **Graph**

- Microbial protein
- Host protein
- Selected
- Predicted interaction
- Experimentally verified

Export | Sub-Graph | Hub Protein | Layout

Filter: Interaction type – physical association

Table View

Taxon View  
 Bacteria » Proteobacteria » Epsilonproteobacteria » Campylobacterales » Helicobacteraceae » **Helicobacter** ( 3037 Genomes )

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Table | Graph

KEYWORDS: ADV Search experimental physical association EVIDENCE x INTERACTION\_TYPE x

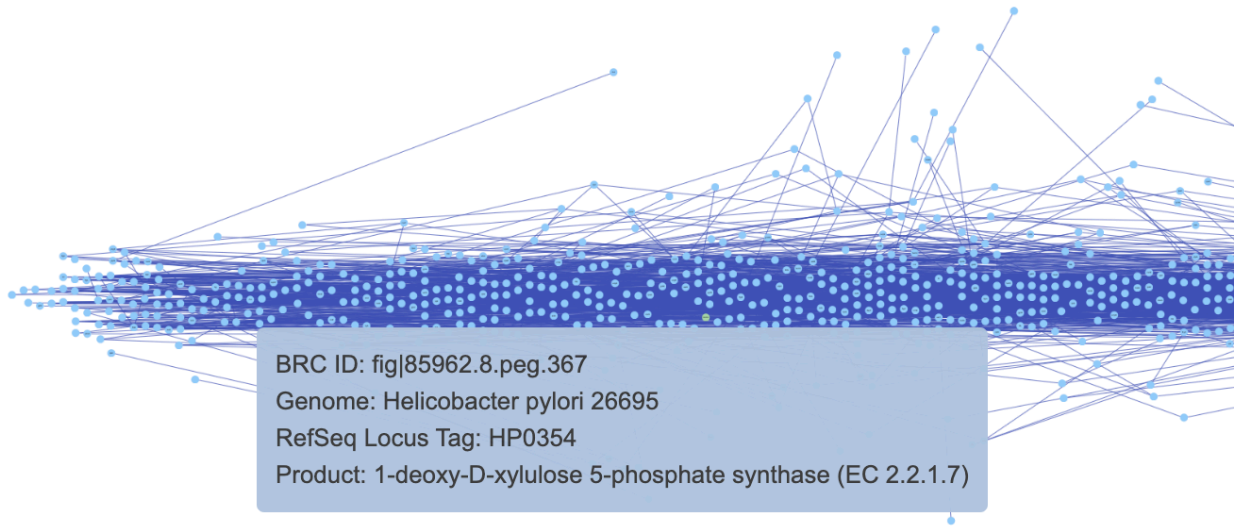
Category Evidence Detection Method Interaction Type Source Db Genome Name A Genome Name B

Category	Evidence	Detection Method	Interaction Type	Source Db	Genome Name A	Genome Name B
HPI (1)	experimental (1538)	3 hybrid method (1)	physical association (1538)	dip (525)	Helicobacter pylori 26695 (1538)	Helicobacter pylori 26695 (1537)
PPI (1537)	computational (62)	adenylate cyclase complementation (1) affinity chromatography technology (10) anti bait coimmunoprecipitation (1) cosedimentation (1) cross-linking study (1) domain fusion (2) experimental interaction detection (66) gene neighbourhood (26) inference (13)	association (157) direct interaction (4) physical interaction (790) predicted interaction (27380)	gene ontology (1) intact (621) kegg pathways (27) mint (941) mpidb (13) string (81)		Homo sapiens (1)

<input type="checkbox"/>	Interactor A	Gene A	Desc A	Interactor B	Gene B	Desc B	Category	Interaction Type	Detection Method	Evidence
<input type="checkbox"/>	fig 85962.8.peg.58		Proline dehydrogenase (EC fig 85962.8.peg.808			Guanosine-3',5'-bis(diphos	PPI	physical association	two hybrid	experimental
<input type="checkbox"/>	fig 85962.8.peg.1190		Chromosome (plasmid) pai fig 85962.8.peg.354			hypothetical protein	PPI	physical association	two hybrid	experimental
<input type="checkbox"/>	fig 85962.8.peg.1297	alaS	Alanyl-tRNA synthetase (Ei fig 85962.8.peg.353			hypothetical protein	PPI	physical association	two hybrid	experimental
<input type="checkbox"/>	fig 85962.8.peg.803	flhB	Flagellar biosynthesis protx fig 85962.8.peg.1638	flgC		Flagellar basal-body rod pr	PPI	physical association, predic	two hybrid array, interologs	experimental, computational
<input type="checkbox"/>	fig 85962.8.peg.1538		ABC transporter, substrate. fig 85962.8.peg.97			type II restriction enzyme I	PPI	physical association	two hybrid array	experimental
<input type="checkbox"/>	fig 85962.8.peg.166		hypothetical protein fig 85962.8.peg.753			hypothetical protein	PPI	physical association	two hybrid array	experimental
<input type="checkbox"/>	fig 85962.8.peg.313		Dipeptide transport ATP-bir fig 85962.8.peg.205			Enoyl-[acyl-carrier-protein]	PPI	physical association	two hybrid array	experimental
<input type="checkbox"/>	fig 85962.8.peg.504		GTP-binding protein TypA/ fig 85962.8.peg.840	acpS		Holo-[acyl-carrier-protein] s	PPI	physical association	two hybrid array	experimental
<input type="checkbox"/>	fig 85962.8.peg.1570		LSU ribosomal protein L25, fig 85962.8.peg.786	flsI		Flagellar biosynthesis protx	PPI	physical association	two hybrid array	experimental
<input type="checkbox"/>	fig 85962.8.peg.404		Positive regulator of CheA, fig 85962.8.peg.405			Signal transduction histidin	PPI	physical association, predic	two hybrid, two hybrid array	experimental, computational
<input type="checkbox"/>	fig 85962.8.peg.268		Flagellar protein FlhB fig 85962.8.peg.1667	flgG		Flagellar basal-body rod pr	PPI	physical association	two hybrid array	experimental
<input type="checkbox"/>	fig 85962.8.peg.1338		Indole-3-glycerol phosphat, fig 85962.8.peg.268			Flagellar protein FlhB	PPI	physical association	two hybrid array	experimental
<input type="checkbox"/>	fig 85962.8.peg.1444		ATP-dependent protease L, fig 85962.8.peg.1454			hypothetical protein	PPI	physical association	two hybrid	experimental
<input type="checkbox"/>	fig 85962.8.peg.439		hypothetical protein fig 85962.8.peg.5			Orotidine 5'-phosphate dec	PPI	physical association, physics	two hybrid	experimental
<input type="checkbox"/>	fig 85962.8.peg.901	hypA	[NiFe] hydrogenase nickel fig 85962.8.peg.96			Type II restriction enzyme I	PPI	physical association	two hybrid array	experimental
<input type="checkbox"/>	fig 85962.8.peg.1643		iron(III) ABC transporter, pt fig 85962.8.peg.406			chemotaxis protein (cheV)	PPI	physical association	two hybrid array	experimental
<input type="checkbox"/>	fig 85962.8.peg.159		hypothetical protein fig 85962.8.peg.572			cag island protein, CYTOT1	PPI	physical association	two hybrid	experimental
<input type="checkbox"/>	fig 85962.8.peg.291		Lipid A biosynthesis lauroyl fig 85962.8.peg.1345			Acid phosphatase (EC 3.1. PPI	PPI	physical association	two hybrid array	experimental
<input type="checkbox"/>	fig 85962.8.peg.140		L-serine dehydratase, beta fig 85962.8.peg.1595			hypothetical protein	PPI	physical association	two hybrid array	experimental
<input type="checkbox"/>	fig 85962.8.peg.10	dnaG	DNA primase (EC 2.7.7.-) fig 85962.8.peg.681			hypothetical protein	PPI	physical association, physics	two hybrid	experimental
<input type="checkbox"/>	fig 85962.8.peg.145		Predicted L-lactate dehydr; fig 85962.8.peg.932			[NiFe] hydrogenase nickel	PPI	physical association	two hybrid	experimental
<input type="checkbox"/>	fig 85962.8.peg.1639	flgB	Flagellar basal-body rod pr fig 85962.8.peg.1333			Paralyseed flagella protein F	PPI	physical association, physics	two hybrid	experimental
<input type="checkbox"/>	fig 85962.8.peg.407		FIG022708: hypothetical pr fig 85962.8.peg.988			Acetyl-coenzyme A carbox	PPI	physical association, physics	two hybrid	experimental
<input type="checkbox"/>	fig 85962.8.peg.123		DNA topoisomerase I (EC : fig 85962.8.peg.989			hypothetical protein	PPI	physical association, physics	two hybrid	experimental
<input type="checkbox"/>	fig 85962.8.peg.868	engA	GTP-binding protein EngA, fig 85962.8.peg.354			hypothetical protein	PPI	physical association, physics	two hybrid	experimental

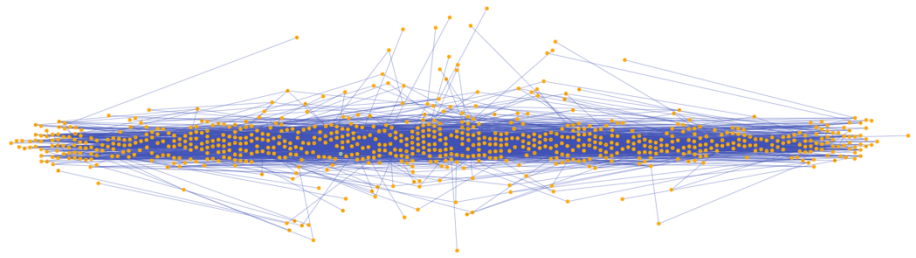
1 - 200 of 1538 results

## Graph View



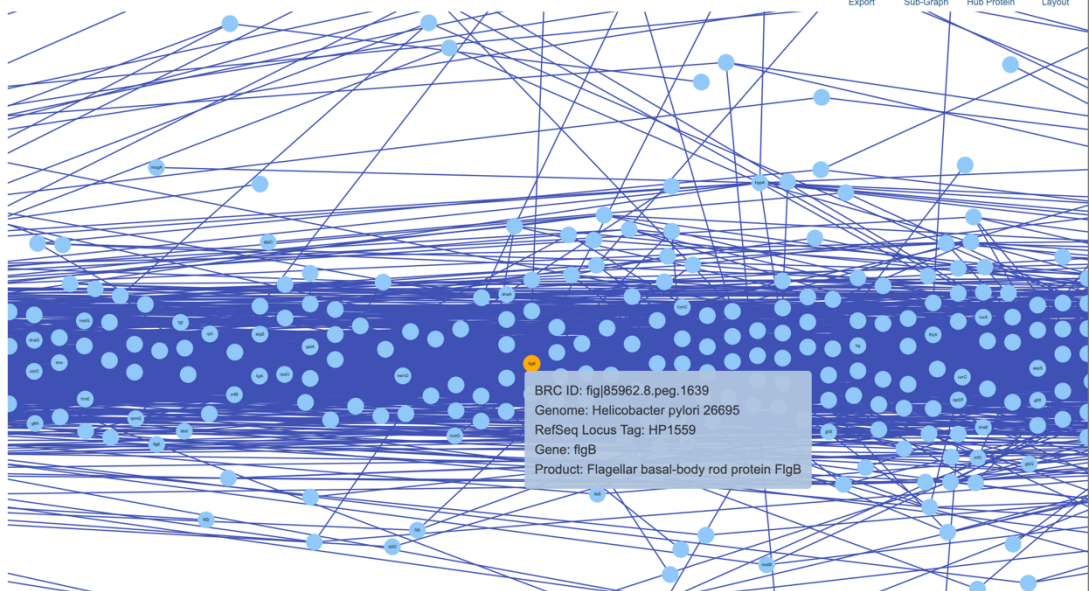
## Graph function: Subgraph – select with 20 or more nodes

- Microbial protein
- Host protein
- Selected
- Predicted interaction
- Experimentally verified

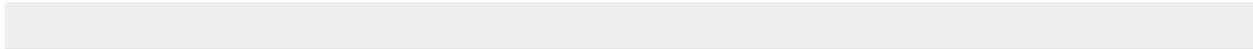


## Graph function: Hub Protein – select most connected hub

- Microbial protein
- Host protein
- Selected
- Predicted interaction
- Experimentally verified



Graph function: Layout – concentric



-  Export
-  Sub-Graph
-  Hub Protein
-  Layout

