

# Ready to make the GO annotation on GONUTS

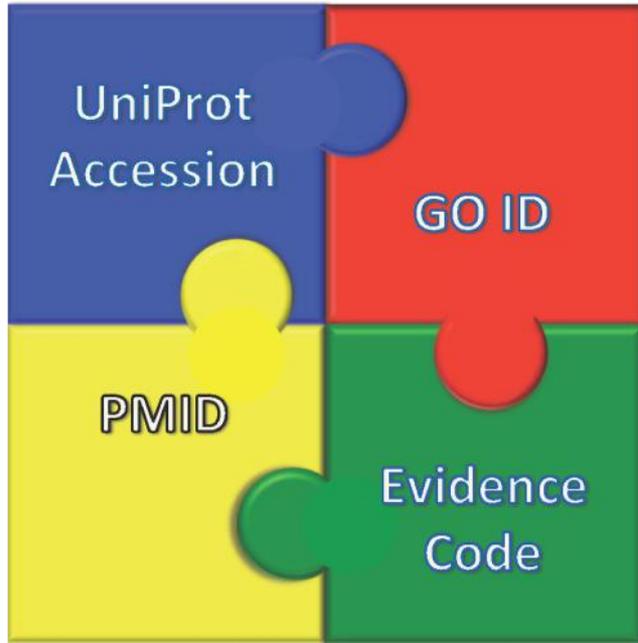


Table filled in with all required information

Protein Name	Sept2 (synonyms: <i>Nedd-5</i> , <i>Nedd5</i> )
Uniprot ID	MOUSE:SEPT2
Organism	Mouse
Paper Name	Nedd5, a mammalian septin, is a novel cytoskeletal component interacting with actin-based structures. <i>Genes Dev.</i> 11:1535-47
PMID	PMID:9203580
GO ID & term name	GO:0030496 ! midbody
Evidence Code	ECO:0000314 direct assay evidence used in manual assertion
Notes	Neural precursor cell expressed developmentally down-regulated protein 5 (Nedd5) In Figures 3Ad-3Af, it is shown that Nedd5 localizes to the midbody during late telophase.

# Your GONUTS account

## Username:

Use the user account you are assigned *\*\*new students speak to instructors*

All contributions are publicly visible

Step 1 - login



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Cacao

Main page Discussion

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Log in

GONUTS has been updated to MW1.29.2. Most things seem to be working but be sure to report problems.

[Have any questions? Please email us at ecoliwiki@gmail.com](mailto:ecoliwiki@gmail.com)

## Main Page

Welcome to

# GONUTS

the *Gene Ontology Normal Usage Tracking System*

GONUTS is the current home of **CACAO!**



# Gene Ontology Normal Usage Tracking System - GONUTS wiki

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## Step 4 - Edit table

This is how you enter your GO annotation on the GONUTS web interface

Follow the instructions on these slides

After submission, the judges will review your annotation for accuracy



# Create a literature page in GONUTS

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Special page

GONUTS has been updated to MW1.29.2. Most things seem to be working but be sure to report problems.  
[Have any questions? Please email us at ecoliwiki@gmail.com](mailto:ecoliwiki@gmail.com)

## Create a New Literature Page from PMID

PMID:

Enter a valid PMID ID to create a new literature page in the wiki, containing information fetched from PubMed

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1. Enter PMID, click submit

2. On literature page, check for annotations already made in table below

Step 2 - Create a new literature page  
-look at annotations

PMID:28813669

<b>Citation</b>	Chaikeeratisak, V, Nguyen, K, Egan, ME, Erb, ML, Vavilina, A and Pogliano, J (2017) The Phage Nucleus and Tubulin Spindle Are Conserved among Large Pseudomonas Phages. <i>Cell Rep</i> 20:1563-1571	<b>Contents [hide]</b> 1 Significance 2 Annotations 3 Notes 4 See also 5 References						
<b>Abstract</b>	We recently demonstrated that the large Pseudomonas chlororaphis bacteriophage 201ϕ2-1 assembles a nucleus-like structure that encloses phage DNA and segregates proteins according to function, with DNA processing proteins inside and metabolic enzymes and ribosomes outside the nucleus. Here, we investigate the replication pathway of the Pseudomonas aeruginosa bacteriophages ϕKZ and ϕPA3. Bacteriophages ϕKZ and ϕPA3 encode a proteinaceous shell that assembles a nucleus-like structure that compartmentalizes proteins and DNA during viral infection. We show that the tubulin-like protein PhuZ encoded by each phage assembles a bipolar spindle that displays dynamic instability and positions the nucleus at midcell. Our results suggest that the phage spindle and nucleus play the same functional role in all three phages, 201ϕ2-1, ϕKZ, and ϕPA3, demonstrating that these key structures are conserved among large Pseudomonas phages.							
<b>Links</b>	PubMed <a href="#">PMC6028189</a> Online version:10.1016/j.celrep.2017.07.064							
<b>Keywords</b>	Conserved Sequence; DNA, Viral/genetics; DNA, Viral/metabolism; DNA, Viral/ultrastructure; Microscopy, Fluorescence; Pseudomonas Phages/classification; Pseudomonas Phages/genetics; Pseudomonas Phages/metabolism; Pseudomonas Phages/ultrastructure; Pseudomonas aeruginosa/ultrastructure; Pseudomonas aeruginosa/virology; Ribosomes/genetics; Ribosomes/metabolism; Ribosomes/ultrastructure; Tubulin/genetics; Tubulin/metabolism; Tubulin/ultrastructure; Viral Proteins/genetics; Viral Proteins/metabolism; Viral Proteins/ultrastructure; Virus Replication							
<a href="#">edit table</a>								
<b>Significance</b> <a href="#">[edit]</a>								
<b>Annotations</b> <a href="#">[edit]</a>								
Showing 0 to 0 of 0 entries								
<b>Gene product</b>	<b>Qualifier</b>	<b>GO ID</b>	<b>GO term name</b>	<b>Evidence Code</b>	<b>with/from</b>	<b>Aspect</b>	<b>Notes</b>	<b>Status</b>
No data available in table								



# Create a gene page in GONUTS for your protein

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## Create New Gene Page

To create a new gene page, please select a database and enter a unique identifier such as an ID or an accession number. Please be patient, creating a page may take up to 30 seconds.

UniProtKB AC/ID

**Step 3 - Create a gene page**

**I. Enter UniProt ID/Accession, create page**

Protein Name	Sept2 (synonyms: <i>Nedd-5</i> , <i>Nedd5</i> )
Uniprot ID	MOUSE:SEPT2
Organism	Mouse
Paper Name	<i>Nedd5</i> , a mammalian septin, is a novel cytoskeletal component interacting with actin-based structures. <i>Genes Dev.</i> 11:1535-47
PMID	PMID:9203580
GO ID & term name	GO:0030496 ! midbody

# Gene page

## SINDV:POLSF

<b>Species (Taxon ID)</b>	<i>Sindbis virus (SINV)</i> . ( <a href="#">11034</a> )
<b>Gene Name(s)</b>	No Information Provided.
<b>Protein Name(s)</b>	Frameshifted structural polyprotein p130 Capsid protein Coat protein C Precursor of protein E3/E2 p62 pE2 Assembly protein E3 Spike glycoprotein E2 E2 envelope glycoprotein Protein TF

### External Links

UniProt	<a href="#">P0DOK0</a>
EMBL	<a href="#">J02363</a>
RefSeq	<a href="#">YP_006491225.1</a>
GeneID	<a href="#">13165406</a>
KEGG	<a href="#">vg:13165406</a>
KO	<a href="#">K19288</a>
Proteomes	<a href="#">UP000006710</a>
	<a href="#">GO:0030430</a> <a href="#">GO:0020002</a>

### Contents [\[hide\]](#)

- [1 Annotations](#)
- [2 Notes](#)
- [3 References](#)

# Check if this annotation has already been made

Species (Taxon ID)	<i>Sindbis virus (SINV)</i> . ( <a href="#">11034</a> )
Gene Name(s)	No Information Provided.
Protein Name(s)	Frameshifted structural polyprotein p130 Capsid protein Coat protein C Precursor of protein E3/E2 p62 pE2 Assembly protein E3

**Annotations** [\[edit\]](#)

UniProt  
EMBL  
RefSeq  
GeneID  
KEGG  
KO  
Proteomes

Filter Rows:  Evidence:

Showing 1 to 30 of 30 entries

Qualifier	GO ID	GO term name	Reference	Evidence Code	with/from	Aspect	Notes	Status
	<a href="#">GO:0004252</a>	serine-type endopeptidase activity	<a href="#">GO_REF:0000002</a>	IEA: Inferred from Electronic Annotation	<a href="#">InterPro:IPR000930</a> <a href="#">InterPro:IPR002533</a> <a href="#">InterPro:IPR002548</a>	F	Seeded From UniProt	
	<a href="#">GO:0005198</a>	structural molecule activity	<a href="#">GO_REF:0000002</a>	IEA: Inferred from Electronic Annotation	<a href="#">InterPro:IPR000936</a>	F	Seeded From UniProt	
...								
	<a href="#">GO:0055036</a>	virion membrane	<a href="#">GO_REF:0000039</a>	IEA: Inferred from Electronic Annotation	<a href="#">UniProtKB-SubCell:SL-0275</a>	C	Seeded From UniProt	

[edit table](#)

Same GO term, but new paper = make annotation



# I. Add annotation to gene page

Species (Taxon ID)	<i>Sindbis virus (SINV)</i> . (11034 <a href="#">↗</a> )
Gene Name(s)	No Information Provided.
Protein Name(s)	Frameshifted structural polyprotein p130 Capsid protein Coat protein C Precursor of protein E3/E2 p62 pE2 Assembly protein E3 Spike glycoprotein

**Annotations** [\[edit\]](#)

- UniProt
- EMBL
- RefSeq
- GeneID
- KEGG
- KO
- Proteomes

Filter Rows:  Evidence: Any/All [↕](#)

Showing 1 to 30 of 30 entries

Qualifier	GO ID	GO term name	Reference	Evidence Code	with/from	Aspect	Notes	Status
	GO:0004252	serine-type endopeptidase activity	<a href="#">GO_REF:0000002</a>	IEA: Inferred from Electronic Annotation	<a href="#">InterPro:IPR000930</a> <a href="#">InterPro:IPR002533</a> <a href="#">InterPro:IPR002548</a>	F	Seeded From UniProt	
	GO:0005198	structural molecule activity	<a href="#">GO_REF:0000002</a>	IEA: Inferred from Electronic Annotation	<a href="#">InterPro:IPR000936</a>	F	Seeded From UniProt	
...								
	GO:0055036	virion membrane	<a href="#">GO_REF:0000039</a>	IEA: Inferred from Electronic Annotation	<a href="#">UniProtKB-SubCell:SL-0275</a>	C	Seeded From UniProt	

Click 'edit table'



[edit table](#)

# TableEdit

SINDV:POLSF

## 2. Add row to annotation table

Showing 1 to 30 of 30 entries

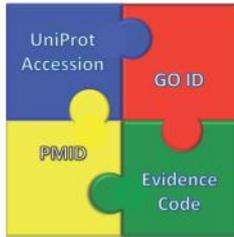
	Qualifier	GO ID	GO term name	Reference	Evidence Code	with/from	Aspect	Notes	Status
<a href="#">Copy</a> <i>protected</i>		GO:0005198	structural molecule activity	GO_REF:0000002	IEA: Inferred from Electronic Annotation	InterPro:IPR000936	F	Seeded From UniProt	
<a href="#">Copy</a> <i>protected</i>		GO:0008233	peptidase activity	GO_REF:0000037	IEA: Inferred from Electronic Annotation	UniProtKB-KW:KW-0645	F	Seeded From UniProt	
<a href="#">Copy</a> <i>protected</i>		GO:0055036	virion membrane	GO_REF:0000002	IEA: Inferred from Electronic Annotation	InterPro:IPR002533 InterPro:IPR002548	C	Seeded From UniProt	

Click 'add row'

Add row

Add multiple

# 3. Copy info from your table to the form



Protein Name	Sept2 (synonyms: <i>Nedd-5</i> , <i>Nedd5</i> )
Uniprot ID	MOUSE:SEPT2
Organism	Mouse
Paper Name	Nedd5, a mammalian septin, is a novel cytoskeletal component interacting with actin-based structures. <i>Genes Dev.</i> 11:1535-47
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### TableEdit

SINDV:POLSF

Qualifier	<input type="text"/>
GO ID	<input type="text"/>
GO term name	<input type="text"/>
Reference	<input type="text"/>
Evidence Code	<input type="text"/>
with/from	<input type="text"/>
Aspect	<input type="text"/>
Notes	<input type="text"/>
Status	Missing: GO ID, evidence, reference

Refresh Save Row Cancel

# 4. Double check all your entered information

Remember, the notes section needs the following items to be correct:

1. Organism
2. Protein name as named in paper and uniprot if they are different
3. Figure in paper that supports your annotation with a little description

If you miss these items, your points may be stolen via challenge!!

If your page does not automatically refresh, click refresh to populate in the GO term name and aspect

TableEdit	
SINDV:POLSF	
Qualifier	<input type="text"/>
GO ID	<input type="text" value="GO:0019031"/>
GO term name	viral envelope
Reference	PMID: <input type="text" value="27852864"/>
Evidence Code	IMP: Inferred from Mutant Phenotype
with/from	
Aspect	C
Notes	<p>Figure 6C demonstrates that the E1, E2, and TF proteins (all products of the frameshifted polyprotein) are found in the virion envelope of Sindbis virus.</p>
Status	complete
<input type="button" value="Refresh"/> <input type="button" value="Save Row"/> <input type="button" value="Cancel"/>	

# 5. Save row, first iteration

TableEdit	
SINDV:POLSF	
Qualifier	<input type="text"/>
GO ID	<input type="text" value="GO:0019031"/>
GO term name	viral envelope
Reference	PMID: <input type="text" value="27852864"/>
Evidence Code	IMP: Inferred from Mutant Phenotype <input type="text"/>
with/from	
Aspect	C
Notes	<div>Figure 6C demonstrates that the E1, E2, and TF proteins (all products of the frameshifted polyprotein) are found in the virion envelope of Sindbis virus.</div>
Status	complete
<input type="button" value="Refresh"/> <input type="button" value="Save Row"/> <input type="button" value="Cancel"/>	

When done, click save row 

# 6. Save row, second iteration

**TableEdit**

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**SINDV:POLSF**

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Changes are not saved permanently until you save the table back to the wiki page

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Scroll all the way to below the annotation table

<input type="button" value="Copy"/> <i>protected</i>		GO:0055036	virion membrane	GO_REF:0000002	IEA: Inferred from Electronic Annotation	InterPro:IPR002533 InterPro:IPR002548	C	Seeded From UniProt	
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Click Save table to wikipage



# 7. Check the annotation row saved to the table

Annotations [\[edit\]](#)

Updated number of entries



Scroll down the annotation table

Filter Rows:  Evidence: Any/All

Showing 1 to 31 of 31 entries

Qualifier ^	GO ID	GO term name	Reference	Evidence Code	with/from	Aspect	Notes	Status
	<a href="#">GO:0004252</a>	serine-type endopeptidase activity	<a href="#">GO_REF:0000002</a>	IEA: Inferred from Electronic Annotation	<a href="#">InterPro:IPR000930</a> <a href="#">InterPro:IPR002533</a> <a href="#">InterPro:IPR002548</a>	F	Seeded From UniProt	
■ ■ ■								
	<a href="#">GO:0055036</a>	virion membrane	<a href="#">GO_REF:0000039</a>	IEA: Inferred from Electronic Annotation	<a href="#">UniProtKB-SubCell:SL-0275</a>	C	Seeded From UniProt	
	<a href="#">GO:0019031</a>	viral envelope	<a href="#">PMID:27852864<sup>[1]</sup></a>	IMP: Inferred from Mutant Phenotype		C	Figure 6C demonstrates that the E1, E2, and TF proteins (all products of the frameshifted polyprotein) are found in the virion envelope of Sindbis virus.	complete

Your new annotation row



[edit table](#)