

# CACAO training part 2

Jim Hu and Suzi Aleksander

For UW Parkside

Fall 2014

# Outline for today

- Making annotations
- The CACAO scoreboards
  - Session page
  - Team page
  - User page
- Making challenges

# Log in



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GON  
It is now

This is your last page project. You can help RedFox by taking this short survey. [to your own annotations if they have been challenged. Please note, although we ENCOURAGE challenges, an excess of identical challenges that do not appear to be applicable to the annotation or well thought out will be considered spam and ignored.](#)

## Main Page

Welcome to

# GONUTS

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

the *Gene Ontology Normal Usage*


*Tracking System*

793 registered users


The GONUTS wiki has been set up to provide third-party documentation for users of the [Gene Ontology Project](#). The GO wiki is **not** an official product of the GO consortium. It was built by users at TAMU for newcomers to the Gene Ontology who want to explore GO usage. The rationale for this wiki is described in [About GONUTS](#).

To browse the ontology pages, search for a term or visit the paramount [GO page](#) page and select a branch. For more information about how this wiki is automatically updated, see [GO wiki scripts](#). For Help using the system, see [Help:Contents](#), which is available in the navigation links from all pages.

# Log in



Special page

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**It is now the CHALLENGE Period for CACAO Fall 2014! It will end Sunday 5 October at 5:59pm**

This is your chance to challenge other team's annotations. You may also DEFEND or suggest improvements to your own annotations IF they have been challenged. Please note, although we ENCOURAGE challenges, an excess of identical challenges that do not appear to be applicable to the annotation or well thought out will be considered spam and ignored.

## Log in

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\* Create new literature case

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# Making annotations

- Review
  - Log in on GONUTS
  - Find paper (PMID) and protein (UniProt)
    - Create a reference/PMID page
  - Create gene page
  - Edit the annotations table: Add a row
    - GO ID
    - Evidence
      - With/from if needed
    - Reference
    - Note

# PMID pages

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Page information

PMID:24955762

<b>Citation</b>	<b>Korczyńska, M, Xiang, DF, Zhang, Z, Xu, C, Narindoshvili, T, Kamat, SS, Williams, HJ, Chang, SS, Kolb, P, Hillerich, B, Sauder, JM, Burley, SK, Almo, SC, Swaminathan, S, Shoichet, BK and Rauschel, FM</b> (2014) Functional annotation and structural characterization of a novel lactonase hydrolyzing D-xylono-1,4-lactone-5-phosphate and L-arabino-1,4-lactone-5-phosphate. <i>Biochemistry</i> 53:4727-38
<b>Abstract</b>	A novel lactonase from <i>Mycoplasma synoviae</i> 53 (MS53_0025) and <i>Mycoplasma agalactiae</i> PG2 (MAG_6390) was characterized by protein structure determination, molecular docking, gene context analysis, and library screening. The crystal structure of MS53_0025 was determined to a resolution of 2.06 Å. This protein adopts a typical amidohydrolase ( $\beta/\alpha$ )8-fold and contains a binuclear zinc center located at the C-terminal end of the $\beta$ -barrel. A phosphate molecule was bound in the active site and hydrogen bonds to Lys217, Lys244, Tyr245, Arg275, and Tyr278. Both docking and gene context analysis were used to narrow the theoretical substrate profile of the enzyme, thus directing empirical screening to identify that MS53_0025 and MAG_6390 catalyze the hydrolysis of d-xylono-1,4-lactone-5-phosphate (2) with $k_{cat}/K_m$ values of $4.7 \times 10(4)$ and $5.7 \times 10(4)$ M(-1) s(-1) and l-arabino-1,4-lactone-5-phosphate (7) with $k_{cat}/K_m$ values of $1.3 \times 10(4)$ and $2.2 \times 10(4)$ M(-1) s(-1), respectively. The identification of the substrate profile of these two phospho-furanose lactonases emerged only when all methods were integrated and therefore provides a blueprint for future substrate identification of highly related amidohydrolase superfamily members.
<b>Links</b>	PubMed <a href="#">PMCID4108184</a> <a href="#">Online version:10.1021/bi500595c</a>
<b>Keywords</b>	
<a href="#">edit table</a>	

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Abstract and full text links are automatically created

Significance [\[edit\]](#)

Annotations [\[edit\]](#)

Showing 1 to 2 of 2 entries Filter Rows:  Evidence: [Any/All](#) ↓

Gene product	Qualifier	GO ID	GO term name	Evidence Code	with/from	Aspect	Notes	Status
<a href="#">MYCAP:A5IZ80</a>		<a href="#">GO:0050490</a>	1,4-lactonase activity	IDA: Inferred from Direct Assay		F	Table 3 shows kinetic parameters for Mag6390 with various substrates	complete

Anywhere the reference is used in an annotation table is shown

# How to create PMID pages

- Search and click the red link
- Make a reference in a table and click the link in a citation
- Edit the URL in the browser
- If you get a message that there is no text, reload the page!

CACAO Spring 2014 has now ended. Please be pa

## Search results

PMID:24955762

[Content pages](#) [Multimedia](#) [Help and Project pages](#) [Everything](#) [Advanced](#)

There were no results matching the query.

Create the page "[PMID:24955762](#)" on this wiki!

PMID:24955762 (page does not exist)



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# Create a gene page

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## CACAO

- Participate in the [Fall 2014 Competition](#)



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# Create a gene page



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Special page

Search

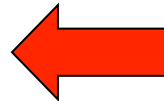
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## Create New Gene Page

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



[\[ edit \]](#)

The GONUTS gene page maker creates a gene page where you can add GO annotations for any gene that has a UniProt Identifier (ID/Entry or Accession) or a NCBI Identifier (GI Number, RefSeq Accession, GenPept Accession). The information generated by the GONUTS gene page maker is UniProt centric. If NCBI identifiers are used to create a gene page, they are [mapped](#) to the corresponding UniProt Accession using in-house tools adapted from the documentation listed [here](#).

# Create a gene page



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## RHOS4:Q3IVY4

<b>Species (Taxon ID)</b>	<i>Rhodobacter sphaeroides</i> (strain ATCC 17023 / 2.4.1 / NCIB 8253 / DSM158). ( <a href="#">272943</a> )
<b>Gene Name(s)</b>	No Information Provided.
<b>Protein Name(s)</b>	Resiniferatoxin-binding, phosphotriesterase-related protein
<b>External Links</b>	
UniProt	<a href="#">Q3IVY4</a>
EMBL	<a href="#">CP000144</a>
RefSeq	<a href="#">YP_355201.1</a>
PDB	<a href="#">3K2G</a>
PDBsum	<a href="#">3K2G</a>

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# Making annotations

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    - GO ID
    - Evidence
      - With/from if needed
    - Reference
    - Note

# Making annotations

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

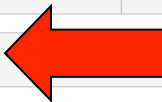
Showing 1 to 5 of 5 entries

Filter Rows:

Evidence:

Qualifier ^	GO ID	GO term name	Reference	Evidence Code	with/from	Aspect	Notes	Status
	<a href="#">GO:0008270</a>	zinc ion binding	<a href="#">GO_REF:0000002</a>	IEA: Inferred from Electronic Annotation	<a href="#">InterPro:IPR001559</a> <a href="#">InterPro:IPR017947</a>	F	Seeded From UniProt	
	<a href="#">GO:0009056</a>	catabolic process	<a href="#">GO_REF:0000002</a>	IEA: Inferred from Electronic Annotation	<a href="#">InterPro:IPR001559</a> <a href="#">InterPro:IPR017947</a>	P	Seeded From UniProt	
	<a href="#">GO:0016788</a>	hydrolase activity, acting on ester bonds	<a href="#">GO_REF:0000002</a>	IEA: Inferred from Electronic Annotation	<a href="#">InterPro:IPR017947</a>	F	Seeded From UniProt	
	<a href="#">GO:0046872</a>	metal ion binding	<a href="#">GO_REF:0000038</a>	IEA: Inferred from Electronic Annotation	<a href="#">UniProtKB-KW:KW-0479</a>	F	Seeded From UniProt	
	<a href="#">GO:0016788</a>	hydrolase activity, acting on ester bonds	<a href="#">PMID:24832101<sup>[1]</sup></a>	IDA: Inferred from Direct Assay		F	Table2 shows kinetic parameters for various substrates. The broad GO term is used as the enzyme acts on carboxylate, phosphphate and phosphonate esters.	complete

[edit table](#)

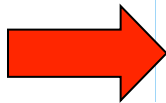


# Making annotations

RHOS4:Q3IVY4 TableEdit Help

Showing 1 to 5 of 5 entries Filter Rows:  Evidence:

	Qualifier	GO ID	GO term name	Reference	Evidence Code	with/from	Aspect	Notes	Status
<input type="button" value="Copy"/> <i>protected</i>		GO:0016788	hydrolase activity, acting on ester bonds	GO_REF:0000002	IEA: Inferred from Electronic Annotation	InterPro:IPR017947	F	Seeded From UniProt	
<input type="button" value="Copy"/> <i>protected</i>		GO:0046872	metal ion binding	GO_REF:0000038	IEA: Inferred from Electronic Annotation	UniProtKB-KW:KW-0479	F	Seeded From UniProt	
<input type="button" value="Edit"/> <input type="button" value="Delete"/> <input type="button" value="Move Row"/> public		GO:0016788	hydrolase activity, acting on ester bonds	PMID:24832101	IDA: Inferred from Direct Assay		F	Table2 shows kinetic parameters for various substrates. The broad GO term is used as the enzyme acts on carboxylate, phosphate and phosphonate esters.	complete
<input type="button" value="Copy"/> <i>protected</i>		GO:0008270	zinc ion binding	GO_REF:0000002	IEA: Inferred from Electronic Annotation	InterPro:IPR001559 InterPro:IPR017947	F	Seeded From UniProt	
<input type="button" value="Copy"/> <i>protected</i>		GO:0009056	catabolic process	GO_REF:0000002	IEA: Inferred from Electronic Annotation	InterPro:IPR001559 InterPro:IPR017947	P	Seeded From UniProt	



# Edit row form

## TableEdit

ECOLI:PARC

<b>Qualifier</b>	<input type="text" value=""/>
<b>GO ID</b>	<input type="text" value="GO:0003918"/>
<b>GO term name</b>	DNA topoisomerase type II (ATP-hydrolyzing) activity
<b>Reference</b>	PMID: <input type="text" value="8227000"/>
<b>Evidence Code</b>	<input type="text" value="IDA: Inferred from Direct Assay"/>
<b>with/from</b>	
<b>Aspect</b>	F
<b>Notes</b>	<input type="text" value="Topoisomerase assay in Fig 3. ATP dependent decatenation means it is a Type II from Fig 4"/>
<b>Status</b>	complete
<input type="text" value="Public"/> <input type="button" value="Refresh"/> <input type="button" value="Save Row"/> <input type="button" value="Cancel"/>	





# GO term warnings

- We don't allow terms that tend to get misused
  - Binding terms
    - Should be used where the binding function by itself is the relevant function
    - Not for substrates and cofactors
  - Response to terms
    - Should be used where the gene product is used to do something in response to the stimulus/stress
    - Not just for changes in gene expression
- Watch out for taxonomy problems
  - Sometimes GO definitions are too specific for eukaryotes or mammals
    - Something that sounds OK isn't
    - Problem can be in the parent terms!

# Do you need a new GO term?

- Sometimes things are missing in GO
- BUT, GO is not intended to capture everything.
  - DO: propose new terms for functions, processes, and components that express general concepts
  - DON'T: propose terms that are too specific
    - examples.
      - regulation of expression of a specific gene
      - Phosphorylation of a specific protein (as opposed to a class of proteins)

# If you need a new GO term

- <http://sourceforge.net>
  - Gene Ontology project > Ticket tracker > More > Ontology requests
- New term request
  - “NTR:” in subject
  - Definition
  - Where in the ontology
  - Explanation of why it is needed w/reference(s)

Home / Browse / Projects / Gene Ontology / Ontology requests

## Gene Ontology

Brought to you by: asangrador, benhitz, cmungall, cooper09, and 20 others

Summary Files Reviews Support Wiki Mailing Lists Tickets SVN CVS

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Group

None	883
AspGD-CGD	44
BHF-UCL	742
CALIPHO	35
Cell-XP	15
EcoWiki	14
FlyBase	182
MENGO	9
MGI	177
PAINT	392
Plant Ontology	15
PomBase	1997
Reactome	188
SGD	504
YUP	278

### Ontology requests

Browse ontology requests currently under consideration.

Showing 25 results of 329

#	Summary	Milestone	Status	Owner	Creator	Created	Labels	Price
11208	OTR: mitotic anaphase-promoting complex activity	None	open		Helen Attrill	5 hours ago		5
11207	dynein binding vs dynein complex binding	None	open	Harold J. Drabkin	Chris Mungall	2 days ago		5
11204	final clean up for cytokinesis	PomBase	open	Jane Lomax	Valerie Wood	3 days ago	Other term-related request, cell cycle	5
11203	MP GO:0032118 horsetail-astral microtubule organization	PomBase	open	Jane Lomax	Valerie Wood	3 days ago	cell cycle, Other term-related request	5
11202	1.1.1 mapping	SGD	open	Paola Roncaglia	Rama balakrishnan	2014-02-05	Other term-related request, enzymes	5
							New term request	

# If you need a new GO term

- <http://go.termgenie.org>
- Use when the new term follows one of the template patterns
  - e.g. regulation
- Gives a temp GO ID
  - This will NOT be in GONUTS right away

## TermGenie

TermGenieGO is a tool for creating new terms for the GeneOntology. It uses a pattern-based approach to rapidly generate new terms appropriately within the ontology structure. All terms are reviewed by a senior editor before the final commit to the ontology.

For more details on how to use and register for TermGenie, please have a look at the [TermGenieGO help pages](#).

› **Step 1: Ontology Status** *GeneOntology*

› **Step 2: Templates**

Once you have selected the ontology, the available term generation patterns can be selected from a menu.  
Select Template

After selecting and filling templates, click on the 'Verify Input'-Button below to start the next step.

› **Step 3: Review and Submit**

› **Step 4: Final matters**

Impressum  
Error Console

# If you need a new GO term

- Annotate to a less specific term
  - Include in your note either
    - Link to sourceforge ticket
    - TermGenie temp ID
- Ask us for help with these!

## TermGenie

LG

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› **Step 3:** Review and Submit

› **Step 4:** Final matters

Impressum  
Error Console

# Only during annotation periods



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## CACAO Error

### Error

**i** Cacao is currently not in an annotation period. No annotations are allowed by students participating in Cacao. If you feel this message was reached in error, please contact one of your instructors or a system administrator.

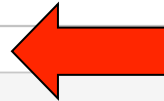
[Privacy policy](#) [About GONUTS](#) [Disclaimers](#)



# Save the row AND save the table

RHOS4:Q3IVY4

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



Showing 1 to 6 of 6 entries

Filter Rows:

	Qualifier	GO ID	GO term name	Reference	Evidence Code	with/from	Aspect	Notes
<input type="button" value="Copy"/> <i>protected</i>		GO:0016788	hydrolase activity, acting on ester bonds	GO_REF:0000002	IEA: Inferred from Electronic Annotation	InterPro:IPR017947	F	Seed
<input type="button" value="Copy"/> <i>protected</i>		GO:0046872	metal ion binding	GO_REF:0000038	IEA: Inferred from Electronic Annotation	UniProtKB-KW:KW-0479	F	Seed
<input type="button" value="Edit"/> <input type="button" value="Copy"/> <input type="button" value="Delete"/>		GO:0016788	hydrolase activity, acting on	PMID:24832101	IDA: Inferred from Direct		F	Table parar subst term

# Outline for today

- Making annotations
- The CACAO scoreboards
  - Session page
  - Team page
  - User page
- Making challenges



# Session Scoreboard

Scoreboard				
Scoreboard	Round 5 Annotations	Round 5 Challenges	Round 5 Need Assessment	Round 5
Team	Inning 5 Standing ▲	Inning 5 Points	Overall Standing	Overall Points
Team Don't be anno-hating	1	93	2	204
Team Buster McThunderstick	2	81	4	121
Team Go Pro	3	70	1	259
Team I got Krebs	4	62	3	203
Team Pitbull Hurricanes	5	25	6	75
Team JAAM	6	22	7	58
Team Niraali	7	20	5	86
Team Ecoli	8	15	9	40
Team Stones Throw	9	11	13	32
Team Loony Toons	10	10	14	31
Team Protein Pushers	11	8	12	33
Team WhiteShyPaulCo	11	8	15	30
Team Hu Ville	12	7	16	23
Team Bucky Lovers	13	5	11	34
Team Diffusion of Responsibility	13	5	23	5
Team Despicable Us	14	0	17	22
Team Bucky's Bugs	14	0	22	10
Team Bcereus	14	0	19	18

# Session Scoreboard

Scoreboard		Round 5 Annotations	Round 5 Challenges	Round 5 Need Assessment	Round 5			
Showing 1 to 10 of 202 entries					<a href="#">First</a> <a href="#">Previous</a> <a href="#">1</a> <a href="#">2</a> <a href="#">3</a> <a href="#">4</a> <a href="#">5</a> <a href="#">Next</a> <a href="#">Last</a>			
Status	Page	User	Date/Time	GO Term (Aspect)	Reference	Evidence	Notes	Links
	PIG:IL6	Drl5141, Team Go Pro	2013-11-04 08:55:36 CST	GO:2000866 - positive regulation of estradiol secretion (P)	PMID:24139936	IDA	Day 15 and 16 of Pregnancy figure 4 show that increased IL-6 leads to increased estradiol 17beta secretion.	challenge
	PIG:IL1B	Drl5141, Team Go Pro	2013-11-04 08:58:57 CST	GO:2000866 - positive regulation of estradiol secretion (P)	PMID:24139936	IDA	Day 15 and 16 of Figure 4 show that increased IL-1beta resulted in an increase in estradiol 17 beta	challenge
	PIG:TNFA	Drl5141, Team Go Pro	2013-11-04 09:02:33 CST	GO:2000866 - positive regulation of estradiol secretion (P)	PMID:24139936	IDA	Figure 4.	challenge
	MYXVL:MT5	Kohli3, Team WhiteShyPaulCo	2013-11-04 09:27:39 CST	GO:0016032 - viral process (P)	PMID:8676463	IMP	Figure 5. Defective growth of M-T5- virus in a CD4+ rabbit T-cell line (RL5).	challenge
	MYXVL:MT5	Kohli3, Team WhiteShyPaulCo	2013-11-04 09:57:33 CST	GO:0019050 - suppression by virus of host apoptosis (P)	PMID:8676463	IMP	Figure 7.	challenge

# Session Scoreboard

Scoreboard	Round 5 Annotations	Round 5 Challenges	Round 5 Need Assessment	Round 5						
Showing 1 to 5 of 5 entries (filtered from 85 total entries)						First	Previous	1	Next	Last
Author,Group	Challenging User,Group	Date Last Challenged	Page	GO Term (Aspect)	Reference	Evidence	Reason for Last Challenge	Links	History	
DrI5141, Team Go Pro	Larichardson, Team WhiteShyPaulCo	2013-11-17 16:45	HUMAN:TRAIP	GO:0034504 - protein localization in nucleus (P)	PMID:19151749	IMP	Shown in Figure 6. The GO TERM is not correct it should be that in TRIP negatively regulates the TNF-mediated activation of NF-κB which is the GO term GO:0050709 which is negative regulation of protein secretion.	challenge or judge	C: 1 A: 3	
DrI5141, Team Go Pro	Roosheel, Team I got Krebs	2013-11-17 16:06	HUMAN:KSYK	GO:0005737 - cytoplasm (C)	PMID:19151749	IDA	I think the qualifier is not needed?	challenge or judge	C: 1 A: 3	
DrI5141, Team Go Pro	Roosheel, Team I got Krebs	2013-11-14 17:06	HUMAN:KSYK	GO:0010803 - regulation of tumor necrosis factor-mediated signaling pathway (P)	PMID:19151749	IMP	Evidence code should be IMP	challenge or judge	C: 1 A: 4	
DrI5141, Team Go Pro	Roosheel, Team I got Krebs	2013-11-14 17:04	HUMAN:NLRC3	GO:0032715 - negative regulation of interleukin-6 production (P)	PMID:22863753	IMP	PMID: 22863753	challenge or judge	C: 2 A: 5	
DrI5141, Team Go Pro	Meganmikkelson, Team Don't be anno-hating	2013-11-12 20:05	PIG:TNFA	GO:2000866 - positive regulation of estradiol secretion (P)	PMID:24139936	IDA	Missing Figure. Notes should include Figure 4	challenge or judge	C: 1 A: 2	
						Filter Rows:	dr			

# Team scoreboards

Showing 1 to 10 of 23 entries							First	Previous	1	2	3	Next	Last
Status	Page	User	Date/Time	GO Term (Aspect)	Reference	Evidence	Notes	Links					
	CAEEL:APN1	Jlensmire, Team Protein Pushers	2013-09-14 21:18:52 CDT	GO:0006284 - base-excision repair (P)	PMID:22819077	ISA with/from UniProtKB:P22936	Figure 1 shows C.elegans APN-1 shows homology to Yeast Apr1, which is involved in DNA repair	<a href="#">challenge</a>					
	EBOZM:VP40	Lleopold, Team Protein Pushers	2013-09-14 22:23:23 CDT	GO:0046788 - egress of virus within host cell (P)	PMID:23297401	IMP	Figure 8	<a href="#">challenge</a>					
	CAEEL:APN1	Jlensmire, Team Protein Pushers	2013-09-15 11:59:26 CDT	GO:0017005 - 3'-tyrosyl-DNA phosphodiesterase activity (F)	PMID:22819077	IDA	Figure 10C shows that APN-1 exhibits a 3' repair diesterase activity	<a href="#">challenge</a>					
	CAEEL:APN1	Jlensmire, Team Protein Pushers	2013-09-15 12:17:10 CDT	GO:0006284 - base-excision repair (P)	PMID:22819077	IDA	Figure 10 shows that APN-1 has the ability to repair various DNA lesions	<a href="#">challenge</a>					
	BOMMO:Q5CCJ5	Jlensmire, Team Protein Pushers	2013-09-15 12:36:31 CDT	GO:0008284 - positive regulation of cell proliferation (P)	PMID:23781494	IDA	Figure 6	<a href="#">challenge</a>					
	SALTI:MGTC	Jlensmire, Team Protein Pushers	2013-09-15 13:21:17 CDT	GO:0009405 - pathogenesis (P)	PMID:19436747	IMP	Figure 2. MgtC mutants showed decreased survival in human cells as compared to the WT	<a href="#">challenge</a>					
	EBOZM:VP40	Lleopold, Team Protein Pushers	2013-09-25 16:53:47 CDT	GO:0019076 - release of virus from host (P)	PMID:23297401	IMP	Figure 2B, 2C show that when certain key amino acids are mutated (L213A, L295A, V298A) they do not induce the same amount of surface pressure into the plasma membrane as compared to WT	<a href="#">challenge</a>					

# User scoreboards

User:Leopold

## My Annotations

Showing 1 to 7 of 7 entries First Previous **1** Next Last

Status	Page	Date/Time	GO Term (Aspect)	Reference	Evidence	Notes	Links
	HPV16:VE5	2013-10-13 10:09:56 CDT	GO:0005886 - plasma membrane (C)	PMID:19712955	IDA	Figure 3 shows localization to the plasma membrane via immunofluorescence data	challenge
	HPV16:VE5	2013-10-13 10:32:31 CDT	GO:0019048 - modulation by virus of host morphology or physiology (P)	PMID:20686024	IDA	Figure 8 depicts the inhibition of endosome vesicle fusion by HP16 E5 protein	challenge
	EBOZM:VP40	2013-09-25 16:53:47 CDT	GO:0019076 - release of virus from host (P)	PMID:23297401	IMP	Figure 2B, 2C show that when certain key amino acids are mutated (L213A, L295A, V298A) they do not induce the same amount of surface pressure into the plasma membrane as compared to WT	challenge
	EBOZM:VP40	2013-11-10 15:34:32 CST	GO:0020002 - host cell plasma membrane (C)	PMID:23297401	IMP	Figure 8: Western blots of cells transfected with WT VP40 and several hydrophobic mutants demonstrate that C-terminal domain plasma membrane penetration is critical for viral egress.	challenge
	EBOZM:VP40	2013-09-25 17:11:46 CDT	GO:0031235 - intrinsic component of the cytoplasmic side of the plasma membrane (C)	PMID:23297401	IMP	Figure 3	challenge
	EBOZM:VP40	2013-09-14 22:23:23 CDT	GO:0046788 - egress of virus within host cell (P)	PMID:23297401	IMP	Figure 8	challenge
	HPV16:VE5	2013-11-10 14:52:22 CST	GO:0072657 - protein localization in membrane (P)	PMID:19712955	IDA	Figure 3 shows protein localization to the plasma membrane via immunofluorescence assay	challenge

Show 10 entries Filter Rows:

## Annotations challenged by Leopold

Showing 1 to 3 of 3 entries First Previous **1** Next Last

Status	Author,Group	Page	GO Term (Aspect)	Reference	Evidence	Links	Page history
	Smahoney2, Team Pitbull Hurricanes	SALT1:DOZSD6	GO:0043190 - ATP-binding cassette (ABC) transporter complex (C)	PMID:24169575	IMP	challenge	C: 1

# Outline for today

- Making annotations
- The CACAO scoreboards
  - Session page
  - Team page
  - User page
- Making challenges

# Challenges

[← Previous Annotation](#) [Next Annotation →](#)

Qualifier	GO ID	GO term name	Reference	Evidence Code	with	Aspect	Notes	Status
	GO:0000155	phosphorelay sensor kinase activity	PMID:15916958	IMP: Inferred from Mutant Phenotype		Molecular Function	Fig. 1 & Fig. 6	complete

This annotation made on page: VIBF1\_Q056Z3  
By: Kallinen (group Team Rubby ducky) on 2014-03-02 13:56:03 CST.

History	Points	New Challenge		
Entry Type	Challenging User, Group	Time/Date	Challenge Reason	Points/Assessment
Private Assessment	Suzialeksander	2014-05-22 16:34:16 CDT	You need to be an instructor to view these notes.	Requires Changes ✗ Protein
Private Assessment	Suzialeksander	2014-04-16 16:22:31 CDT	You need to be an instructor to view these notes.	Corrected Through Challenges ✓ Protein ✓ Publication ✓ Qualifier ✓ Go term ✓ Evidence ✓ With/From ✓ Notes ✓ Unique/Original
Challenge	Jonathanc, Team Rubby ducky	2014-04-12 17:14:35 CDT	Notes are insufficient.	0
Public Assessment	Briddle24	2014-04-01 19:51:44 CDT	Megans earns credit for the annotation.	Corrected Through Challenges ✓ Protein ✓ Publication ✓ Qualifier ✓ Go term ✓ Evidence ✓ With/From ✓ Notes ✓ Unique/Original
Challenge	Megans, Team Rubby ducky	2014-03-26 18:13:00 CDT	New Notes: Figure 2A - Shows that when LuxP is mutated to cause it to be mislocalized, strains produce only very low levels of bioluminescence even at a high cell density/high AI-2 concentrations.	4

- There are many ways to get to the challenge view
- You will see a history of the challenges and assessments
- If the judges have already looked at it, there will be clues about what we think is good and bad about this annotation

# Challenges

## Cacao

[« Previous Annotation](#)

[Next Annotation »](#)

Qualifier	GO ID	GO term name	Reference	Evidence Code	with	Aspect	Notes	Status
	GO:0050490	1,4-lactonase activity	PMID:24955762	IDA: Inferred from Direct Assay		Molecular Function	Table 3 shows kinetic parameters for Ms0025 with various substrates	complete

This annotation made on page: MYCS5:Q4A724  
By: Vangals (group Team Thoth) on 2014-09-21 18:01:48 CDT.

History

Points

**New Challenge**

New Assessment

Fix Annotation

Please provide the reason for this challenge and any supporting evidence. Please enter plaintext or wikitext, no HTML.

Submit a new challenge



# Challenges

- Explain what is wrong
  - As with annotations, the default is that your challenge is wrong unless you can convince us clearly
- You can use wikitext markup in your challenge
  - Useful for links:
    - Internal link `[[page_name]]`
    - Internal link with link text `[[page_name|link text]]`
      - Category page links need a ':' prefix
    - External link `[[URL link text]]`
  - Examples:
    - link to a GO term `[:Category:GO:0050490_!_l,4-lactonase_activity|Category:GO:0050490_!_l,4-lactonase_activity]]`
    - Link to a UniProt page `[http://www.uniprot.org/uniprot/Q4A724|Q4A724]`
  - Links and wikitext are not required (but they make life easier)

# Challenges

- You cannot lose points for making bad challenges
  - But you will annoy the judges if you are not thoughtful
- Look at the other challenges
  - Whoever challenges a particular aspect of the annotation first gets credit, UNLESS
    - The later challenge does a better job of correcting the whole annotation
- Try to figure out if the annotation is fixable
  - If you can't salvage part of the annotation, the “fix” should be a new annotation.

# What the judges do

Qualifier	GO ID	GO term name	Reference	Evidence Code	with	Aspect	Notes	Status
	GO:0050490	1,4-lactonase activity	PMID:24955762	IDA: Inferred from Direct Assay		Molecular Function	Table 3 shows kinetic parameters for Ms0025 with various substrates	complete

This annotation made on page: MYCS5:Q4A724  
By: Vangals (group Team Thoth) on 2014-09-21 18:01:48 CDT.

History Points New Challenge **New Assessment** Fix Annotation

Did not check	Incorrect	Correct	
<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Protein
<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Publication
<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Qualifier
<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Go term
<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Evidence
<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	With/From
<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Notes
<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Unique/Original

Please select the appropriate radio-button after checking each part of the annotation. It is not required that you mark each part of the annotation correct/incorrect.

**Assessment**

Acceptable from the list which describes the current state of this annotation. This field is required.

Unacceptable

Requires Changes

Flagged

Corrected Through Challenges to read your assessment, please select *Public* from the dropdown below. All assessments default to private status —

Updated by Instructor admins can read these comments.

# Remember

- Asking for help is not cheating in CACAO
- Contact us: [ecoliwiki@gmail.com](mailto:ecoliwiki@gmail.com) is read by both Jim and Suzi