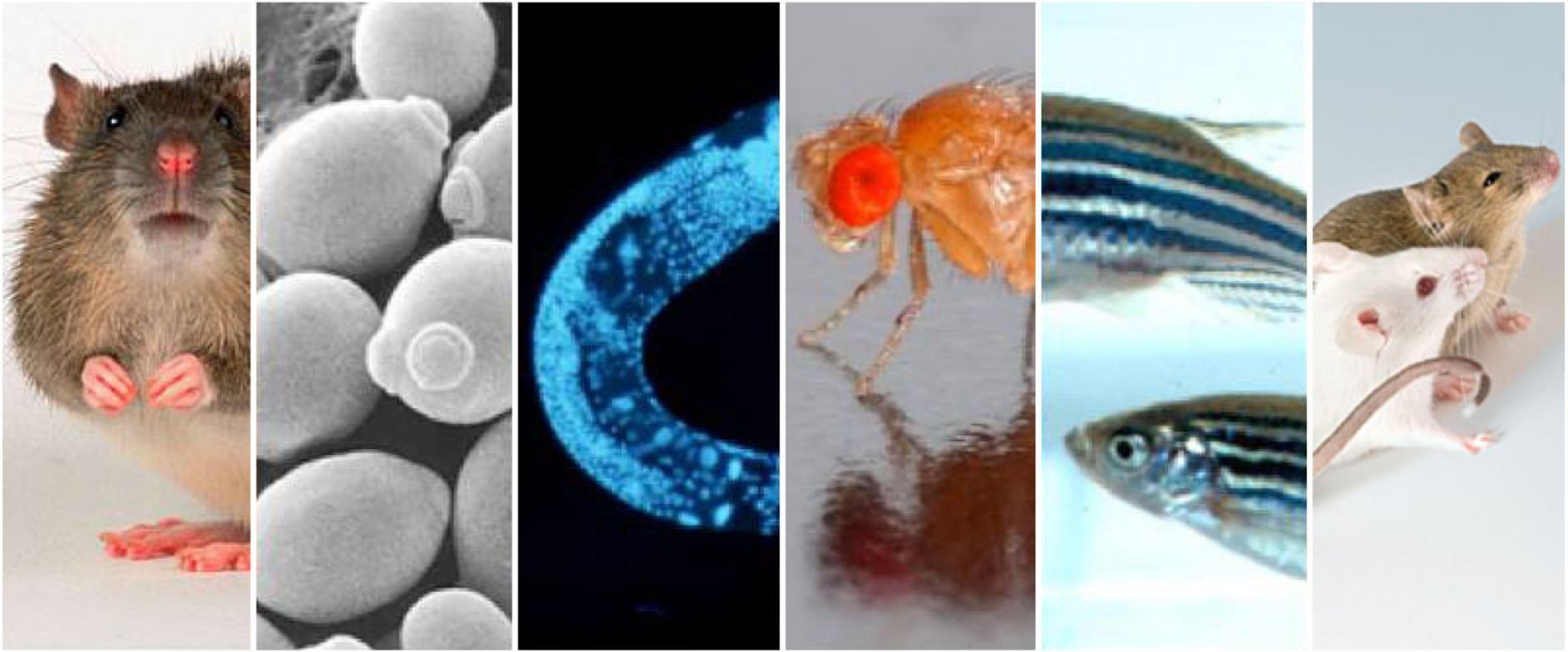
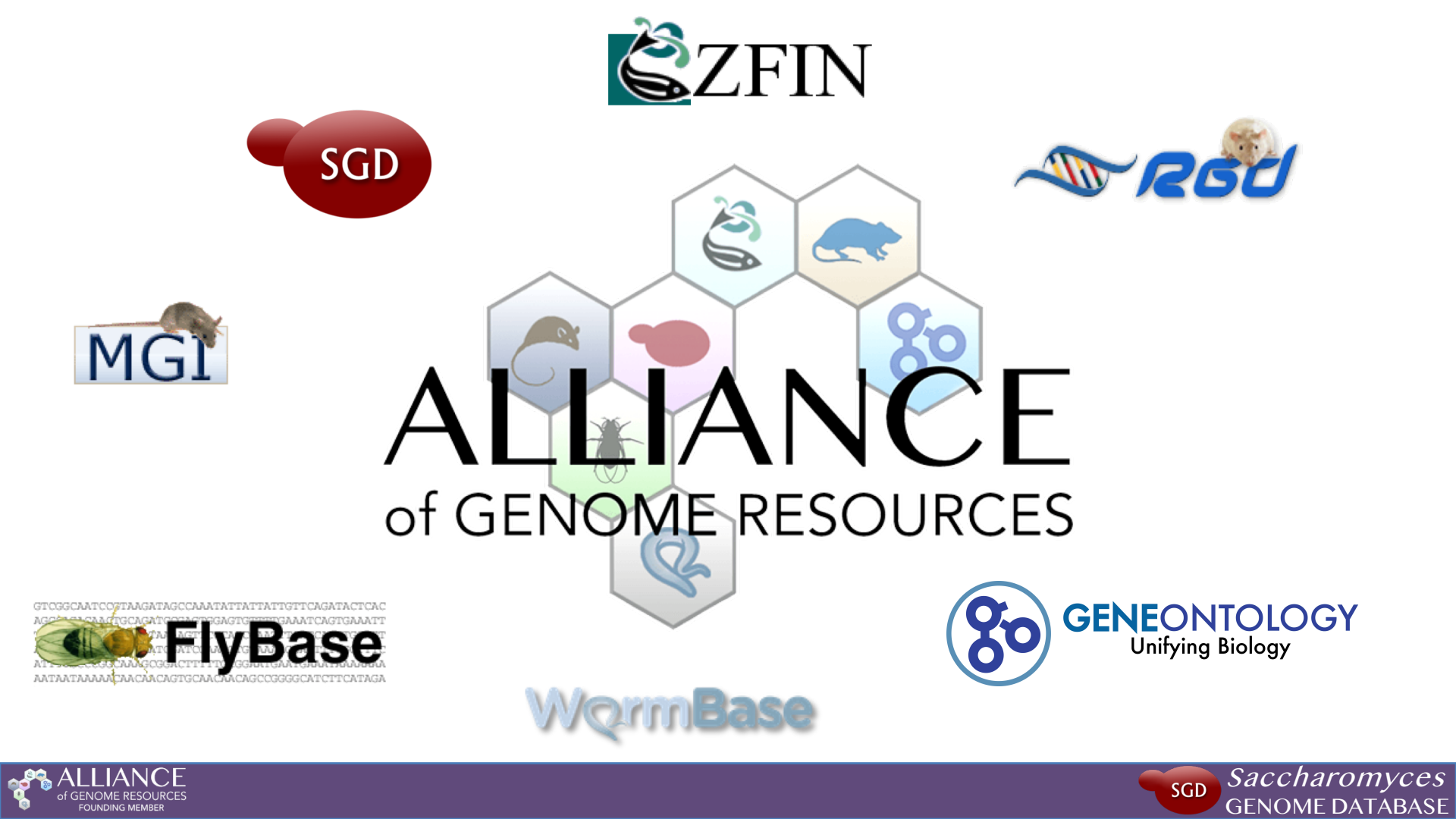

ALLIANCE
of GENOME RESOURCES




ZFIN
SGD
RGD
MGI
ALLIANCE
of GENOME RESOURCES
FlyBase
GENEONTOLOGY
Unifying Biology
WormBase

- Alliance Mission -

develop and maintain

sustainable genome information resources

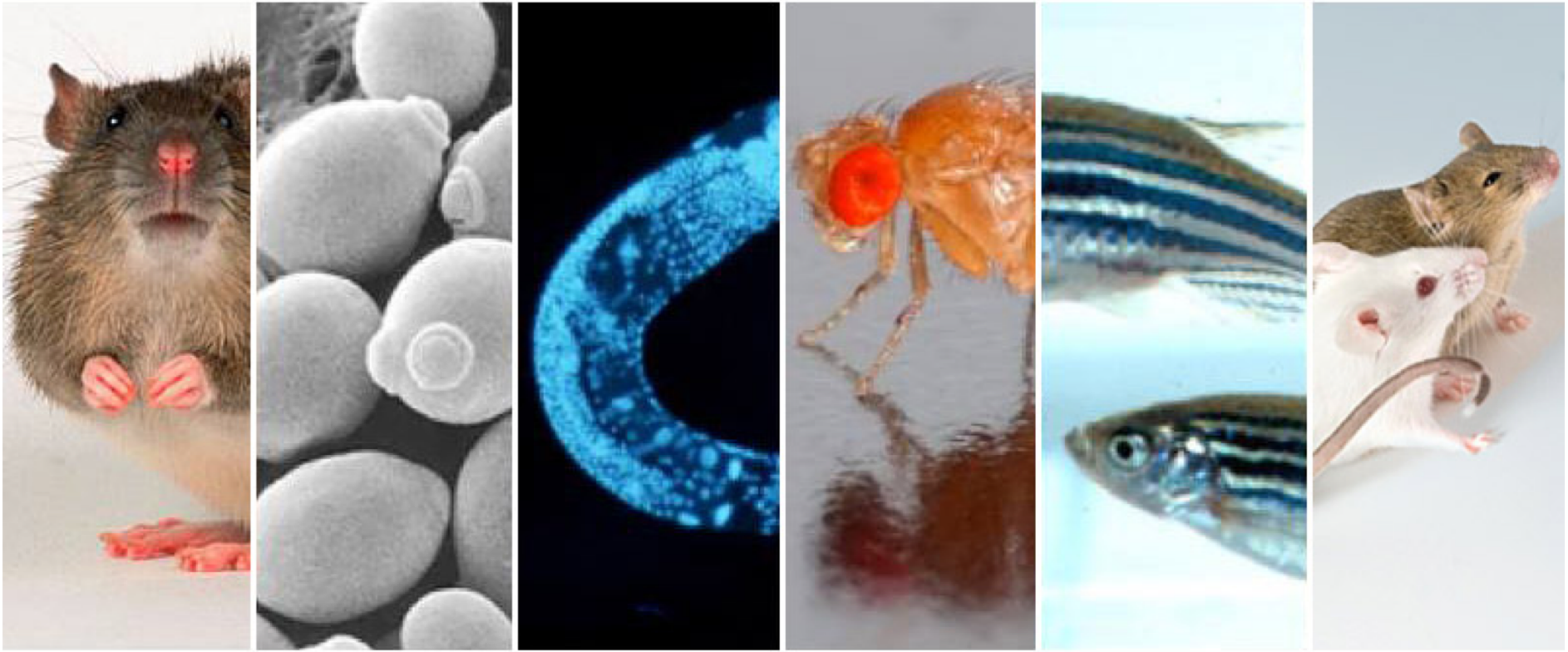
that

facilitate the use of model organisms

to understand

the genetic and genomic bases of

human biology, health, and disease



1.0 *Oct2017*

- Gene pages
- Orthology sets
- Genome browser
- Functional annotations
- Disease pages

2.0 *Oct2018*

- Alleles
- Phenotypes
- Physical interactions
- Expression
- Gene descriptions
- API
- Downloads

2.3 *Nov2019*

- Genotypes
- Variants

In progress…

- Genetic interactions
- Literature

The Alliance 2.2 Release is available now.

NEW FEATURES

MISSION STATEMENT

The primary mission of the Alliance of Genome Resources (the Alliance) is to develop and maintain sustainable genome information resources that facilitate the use of diverse model organisms in understanding the genetic and genomic basis of human biology, health and disease. This

MIP1 / YOR330C Overview

Standard Name: MIP1 [1]
Systematic Name: YOR330C
SGD ID: SGD:S000005857
Feature Type: ORF , Verified
Description: Mitochondrial DNA polymerase gamma; single subunit of mitochondrial DNA polymerase in yeast, in contrast to metazoan complex of catalytic and accessory subunits; polymorphic in yeast, petites occur more frequently in some lab strains; human ortholog POLG complements yeast mip1 mutant; mutations in human POLG associated with Alpers-Huttenlocher syndrome (AHS), progressive external ophthalmoplegia (PEO), parkinsonism, other mitochondrial diseases [2 3 4 5 6 7 8 9]
Name Description: MItochondrial DNA Polymerase [1]
Comparative Info: Integrated model organism details available at the Alliance of Genome Resources website

Sequence

Sequence Details

Download (fsa)

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ALLIANCE of GENOME RESOURCES

All | mip1

Home | Data | About | Work Products | News & Events | Contact Us

MIP1 (Sce)	Gene
mip130 (Dme)	Gene
mip120 (Dme)	Gene
mip120[KG05422] (Dme)	Allele
mip130[1-723+1-36] (Dme)	Allele
mip120[e00802] (Dme)	Allele
mip120[EY08308] (Dme)	Allele
mip120[EP606] (Dme)	Allele
mip130[unspecified] (Dme)	Allele
mip120[P02006] (Dme)	Allele

Category

- Allele 19
- Gene 16
- Gene Ontology 11
- Disease 4

50 results for Q: "mip1" ✖

View As: List | Table

MIP1 (Saccharomyces cerevi

Name: MItochondrial DNA Pol

Synonyms: YOR330C

Source: SGD:S000005857

Biotype: protein coding gene

Symbol: *MIP1* (Sce)

GeneSynopsis: more frequently in some lab strains; human ortholog POLG complements yeast *mip1* mutant; mutations in

mip120 (Drosophila melanogaster) — Gene

Name: Myb-interacting protein 120

Synonyms: *Not Available*

Source: FB:FBgn0033846

Biotype: protein coding

Symbol: *mip120* (Dme)

mip120[KG05422] (Drosophila melanogaster) — Allele

ID: FB:FBal0137596

Gene: mip120 (Dme)

Synonyms: *Not Available*

Diseases: *Not Available*

Symbol: *mip120[KG05422]* (Dme)

MIP1

Saccharomyces cerevisiae

SGD:S000005857

MIP1

Species	*Saccharomyces cerevisiae*
Symbol	MIP1
Name	MItochondrial DNA Polymerase
Synonyms	YOR330C
Biotype	protein coding gene
Automated Description	Exhibits 3'-5' exonuclease activity and DNA-directed DNA polymerase activity; involved in mitochondrial DNA replication; localizes to the mitochondrion; used to study several diseases, including Alpers syndrome, chronic progressive external ophthalmoplegia, and peripheral nervous system disease.
SGD Description	Mitochondrial DNA polymerase gamma; single subunit of mitochondrial DNA polymerase in yeast, in contrast to metazoan complex of catalytic and accessory subunits; polymorphic in yeast, petites occur more frequently in some lab strains; human ortholog POLG complements yeast mip1 mutant; mutations in human POLG associated with Alpers-Huttenlocher syndrome (AHS), progressive external ophthalmoplegia (PEO), parkinsonism, other mitochondrial diseases
Genomic Resources	NCBI_Gene:854508 UniProtKB:P15801
Additional Information	Literature

MIP1

Saccharomyces cerevisiae

SGD:S000005857

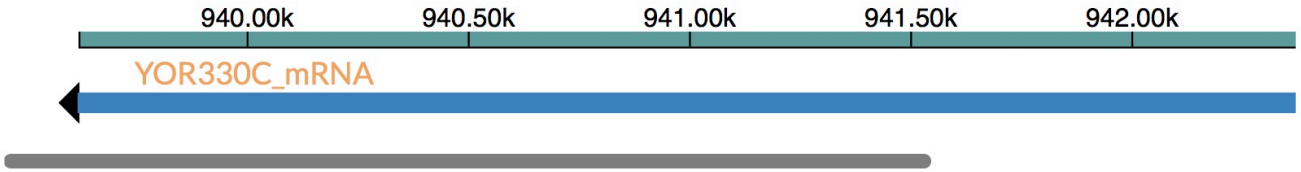
- Summary
- Sequence Feature Viewer
- Function - GO Annotations
- Orthology
- Phenotypes
- Disease Associations
- Expression
- Alleles

Sequence Feature Viewer

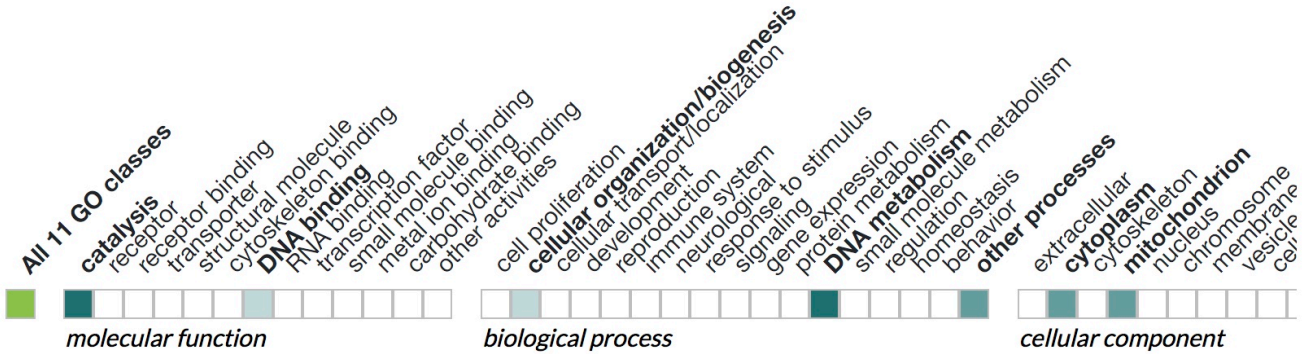
Linkout to genome browser

Genome location chrXV:939621...943385 (3.76 kb)

Assembly version R64-2-1



Function - GO Annotations

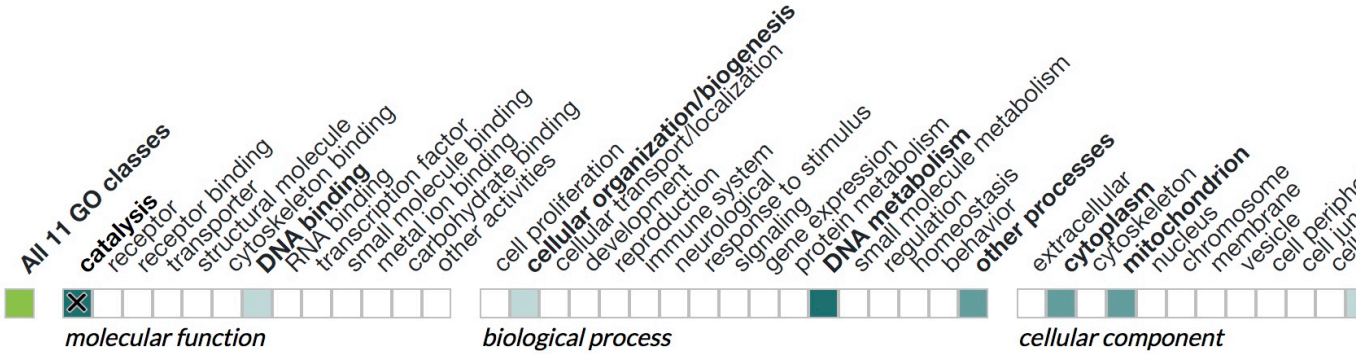


MIP1

Saccharomyces cerevisiae

SGD:S000005857

Function - GO Annotations



Saccharomyces cerevisiae MIP1 annotations at GO to catalysis

Term	Evidence	Based on	Reference
3'-5' exonuclease activity	IDA		PMID:20601
	IBA	PANTHER:PTN000030201, SGD:S000005857	PMID:21873
DNA-directed DNA polymerase activity	IDA		PMID:20601
	IEA	InterPro:IPR001098	SGD_REF:S0
		InterPro:IPR019760	SGD_REF:S0
		EC:2.7.7.7	SGD_REF:S0

MIP1

Saccharomyces cerevisiae

SGD:S000005857

Summary

Sequence Feature Viewer

Function - GO Annotations

Orthology

Phenotypes

Disease Associations

Expression

Alleles

Orthology

Focus gene MIP1 - (Species: Saccharomyces cerevisiae)

Gene tree PANTHER:PTHR10267

Stringency: (•) Stringent filter (default) ( ) Moderate filter ( ) No filter / Show all

Show additional filters | Reset filters

Species	Gene symbol	Count	Best	Best reverse	Method: Ensembl Compara	HGNC	Hieranoid	InParanoid	OMA	OrthoFinder	OrthoInsp	PANT
Homo sapiens	POLG	9 of 10	Yes	Yes	☑	☑	☑	☑	☑	☑	☑	
Mus musculus	Polg	9 of 10	Yes	Yes	☑	☑	☑	☑	☑	☑	☑	

MIP1

Saccharomyces cerevisiae

SGD:S000005857

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Mus musculus	Polg	9 of 10	Yes	Yes	☑	☑	☑	☑	☑	☑	☑	

MIP1

Saccharomyces cerevisiae

SGD:S000005857

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					☑	☑	☑	☑	☑	☑	☑
Polg	9 of 10	Yes	Yes		☑	☑	☑	☑	☑	☑	☑

UNDER CONSTRUCTION

Leadership Team


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Edith Wong, PhD


Marek Skrzypek, PhD


Barbara Dunn, PhD


Joanna Argasinska, PhD

Biocuration Scientists


Suzi Aleksander


Kevin MacPherson, MS


Patrick Ng, MS

Software Developers


Shuai Weng, PhD


Kalpana Karra, MS


Felix Gondwe


Sagar Jha, MS

System Administrators (DevOps)


Stuart Miyasato


Matt Simison

Saccharomyces Genome Database (SGD)
yeastgenome.org

Alliance of Genome Resources
alliancegenome.org

Department of Genetics, Stanford University