



An official website of the United States government

[Here's how you know](#)



National Library of Medicine

National Center for Biotechnology Information

Log in

Protein

GenPept

Delta-aminolevulinate dehydratase, a homo-octameric enzyme [Komagataella phaffii GS115]

NCBI Reference Sequence: XP_002493846.1

[Identical Proteins](#) [FASTA](#) [Graphics](#)

Go to:

LOCUS	XP_002493846	341 aa	linear	PLN 11-OCT-2017
DEFINITION	Delta-aminolevulinate dehydratase, a homo-octameric enzyme [Komagataella phaffii GS115].			
ACCESSION	XP_002493846			
VERSION	XP_002493846.1			
DBLINK	BioProject: PRJNA39439 BioSample: SAMEA2272385			
DBSOURCE	REFSEQ: accession XM_002493801.1			
KEYWORDS	RefSeq.			
SOURCE	Komagataella phaffii GS115			
ORGANISM	Komagataella phaffii GS115 Eukaryota; Fungi; Dikarya; Ascomycota; Saccharomycotina; Saccharomycetes; Saccharomycetales; Phaffomycetaceae; Komagataella.			
REFERENCE	1			
AUTHORS	De Schutter,K., Lin,Y.C., Tiels,P., Van Hecke,A., Glinka,S., Weber-Lehmann,J., Rouze,P., Van de Peer,Y. and Callewaert,N.			
TITLE	Genome sequence of the recombinant protein production host Pichia pastoris			
JOURNAL	Nat. Biotechnol. 27 (6), 561-566 (2009)			
PUBMED	19465926			
REFERENCE	2 (residues 1 to 341)			
CONSRM	NCBI Genome Project			
TITLE	Direct Submission			
JOURNAL	Submitted (11-OCT-2017) National Center for Biotechnology Information, NIH, Bethesda, MD 20894, USA			
REFERENCE	3 (residues 1 to 341)			
AUTHORS	Callewaert,N.			
TITLE	Direct Submission			
JOURNAL	Submitted (05-MAY-2009) Callewaert N., Department for Molecular Biomedical Research, Flanders Institute for Biotechnology (VIB) / Gent University, Technologiepark 927, Ghent, 9052, BELGIUM			
COMMENT	PROVISIONAL REFSEQ : This record has not yet been subject to final NCBI review. The reference sequence is identical to CAY71667 .			
FEATURES	Location/Qualifiers			
source	1..341 /organism="Komagataella phaffii GS115" /strain="GS115" /db_xref="taxon: 644223 " /chromosome="4"			
Protein	1..341 /product="Delta-aminolevulinate dehydratase, a homo-octameric enzyme" /calculated_mol_wt=37610			
Region	21..339 /region_name="ALAD_PBGs" /note="Porphobilinogen synthase (PBGs), which is also called delta-aminolevulinic acid dehydratase (ALAD), catalyzes the condensation of two 5-aminolevulinic acid (ALA) molecules to form the pyrrole porphobilinogen (PBG), which is the second step in the...; cl00338" /db_xref="CDD: 444848 "			
Site	order(23..24,35,59,62,155..156,183..184,214..216,236,239,245,248..249,267..271,296,314,318,321)			

12/18/22, 8:17 PM

Delta-aminolevulinate dehydratase, a homo-octameric enzyme [Komagatael - Protein - NCBI]

Site /site_type="other"
 /note="dimer interface [polypeptide binding]"
 /db_xref="CDD:238226"
 order(132,134,136,144,180,211,217,220..221,226,233,237,264,288,291,330)
Site /site_type="active"
 /db_xref="CDD:238226"
 order(211,264)
 /site_type="active"
 /note="Schiff base residues [active]"
CDS /db_xref="CDD:238226"
 1..341
 /locus_tag="PAS_chr4_0418"
 /coded_by="XM_002493801.1:1..1026"
 /db_xref="EnsemblGenomes-Gn:PAS_chr4_0418"
 /db_xref="EnsemblGenomes-Tr:CAY71667"
 /db_xref="GeneID:8200701"
 /db_xref="GOA:C4R7U2"
 /db_xref="InterPro:IPR001731"
 /db_xref="InterPro:IPR013785"
 /db_xref="UniProtKB/TrEMBL:C4R7U2"

ORIGIN

```

1 mvhkaeyldd hptqissils ggynhp11re wqherqlnkn mfifplfvtd rpdeee1ips
61 lpnikrfgvn klipyvgglv skglravilf gvplkpgvkd eegtaaddpe gpvikaikh1
121 rknfpdlyii tdvclceyts hghcgilyed gtinrelsvr riaavavkya qagansvaps
181 dmtdgrirdi kegl1sagla hktfvmsyaa kfsgnlygpf rdaagscpsq gdrkcyqlps
241 ggkg1ahral irdmne1tdg iivkpstfyl divadayqlc kdypiccyqv sgeyam1haa
301 aeknivdlks iafeahqgfl ragarliisy ftpeflewl1s e

```

//



An official website of the United States government

[Here's how you know](#)



National Library of Medicine
National Center for Biotechnology Information

Log in

Protein

Revision History

Show difference between I and II as

GenBank/GenPept

Compare

[Delta-aminolevulinate dehydratase, a homo-octameric enzyme \[Komagataella phaffii GS115\]](#)

341 aa protein

Accession: XP_002493846.1 GI: 254573474

Current status: live

I	II	Version	Gi	Accession	Update Date	Action
☒	☐	1	254573474	XP_002493846.1	Oct 11, 2017 12:38 PM	
☐	☐	1	254573474	XP_002493846.1	Jun 28, 2016 10:38 PM	
☐	☐	1	254573474	XP_002493846.1	Jul 22, 2009 12:49 PM	
☐	☒	1	254573474	XP_002493846.1	Jul 22, 2009 11:24 AM	

Accession [XP_002493846](#) was first seen at NCBI on Jul 22, 2009 11:24 AM

