

Glyceraldehyde-3-phosphate dehydrogenase A, chloroplastic (GAPA), Recombinant Protein

Cat RP01035

Size 0.02 mg (E-Coli)/ 0.02 mg (Yeast)/ 0.1 mg (E-Coli)/ 0.1 mg (Yeast)/ 0.02 mg (Baculovirus)/ 0.02 mg (Mammalian-Cell)/ 0.1

mg (Baculovirus)/ 1 mg (E-Coli)/ 1 mg (Yeast)/ 0.1 mg (Mammalian-Cell)/ 1 mg (Baculovirus)/ 0.5 mg (Mammalian-Cell)
Species Arabidopsis thaliana (Mouse-ear cress)

Full Product Name

Recombinant Arabidopsis thaliana Glyceraldehyde-3-phosphate dehydrogenase A, chloroplastic (GAPA)

Product Gene Name

GAPA recombinant protein

Purity

Greater or equal to 85% purity as determined by SDS-PAGE. (lot specific)

Sequence

KLKVAINGFG RIGRNFLRCW HGRKDSPLDI IAINDTGGVK QASHLLKYDS TLGIFDADVK PSGETAISVD
GKIIQVVSNR NPSLLPWKEL GIDIVIEGTG VFVDREGAGK HIEAGAKKVI ITAPGKGDIP TYVVGVNADA
YSHDEPIISN ASCTTNCLAP FVKVLDQKFG IIKGTMTTTH SYTGDQRLLD ASHRDLRRAR AAALNIVPTS
TGAAKAVALV LPNLKGKLNQ IALRVPTPNV SVVDLVVQVS KKTFEEVNA AFRDSAEEKL KGILDVCDEP
LVSVDRCSD FSTTIDSSLT MVMGDDMVKV IAWYDNEWGY SQRVVDLADI VANNWK

Sequence Positions

61-396, Full length protein

Format

Lyophilized or liquid (Format to be determined during the manufacturing process)

Host

E Coli or Yeast or Baculovirus or Mammalian Cell

Molecular Weight

42,490 Da

Storage

Store at -20°C. For long-term storage, store at -20°C or -80°C. Store working aliquots at 4°C for up to one week. Repeated freezing and thawing is not recommended.

Protein Family

Glyceraldehyde-3-phosphate dehydrogenase

NCBI Accession

NP_566796.2

NCBI GI

30688425

NCBI GenBank Nucleotide

NM_113576.4

NCBI GeneID

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

Glyceraldehyde-3-phosphate dehydrogenase A, chloroplastic (GAPA), Recombinant Protein

Cat *RP01035*

Size 0.02 mg (*E-Coli*)/ 0.02 mg (*Yeast*)/ 0.1 mg (*E-Coli*)/ 0.1 mg
(*Yeast*)/ 0.02 mg (*Baculovirus*)/ 0.02 mg (*Mammalian-Cell*)/ 0.1

822277 mg (*Baculovirus*)/ 1 mg (*E-Coli*)/ 1 mg (*Yeast*)/ 0.1 mg

(*Mammalian-Cell*)/ 1 mg (*Baculovirus*)/ 0.5 mg (*Mammalian-Cell*)

glyceraldehyde 3-phosphate dehydrogenase A subunit

NCBI Official Symbol

GAPA

NCBI Official Synonym Symbols

GAPA-1; glyceraldehyde 3-phosphate dehydrogenase A subunit; GLYCERALDEHYDE 3-PHOSPHATE DEHYDROGENASE A SUBUNIT; GLYCERALDEHYDE 3-PHOSPHATE DEHYDROGENASE A SUBUNIT 1; GLYCERALDEHYDE-3-PHOSPHATE DEHYDROGENASE A SUBUNIT

NCBI Protein Information

glyceraldehyde 3-phosphate dehydrogenase A subunit

NCBI Summary

Encodes one of the two subunits forming the photosynthetic glyceraldehyde-3-phosphate dehydrogenase (GAPDH) and as such a constituent of the supramolecular complex with phosphoribulokinase (PRK) thought to be linked by a small peptide encoded by CP12-2. GapA-1 is coordinately expressed by light with PRK and CP12-2. The enzyme activity, tested in leaf protein extracts dropped significantly after external sucrose treatment for the photosynthetic GAPDH (NADPH-dependent) but not for the cytosolic GAPDH (NADH-dependent).

UniProt Gene Name

GAPA1

UniProt Synonym Gene Names

GAPA

UniProt Protein Name

Glyceraldehyde-3-phosphate dehydrogenase GAPA1, chloroplastic

UniProt Synonym Protein Names

NADP-dependent glyceraldehydephosphate dehydrogenase A subunit 1

UniProt Primary Accession

P25856

UniProt Secondary Accession

Q41184; Q9LSE6

UniProt Related Accession

P25856

UniProt Comments

Involved in the photosynthetic reductive pentose phosphate pathway (Calvin-Benson cycle). Catalyzes the reduction of 1,3-diphosphoglycerate by NADPH .

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