

Glutamyl-tRNA reductase 2, chloroplastic (HEMA2), Recombinant Protein

Cat RP05066

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

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

Full Product Name

Recombinant Arabidopsis thaliana Glutamyl-tRNA reductase 2, chloroplastic (HEMA2)

Product Gene Name

HEMA2 recombinant protein

Purity

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

Sequence

ASISALEQLK TSAIDRYTKE RSSIVVIGLS IHTAPVEMRE KLAYPEAEWP RAIAELCGLN HIEEAAVLST
CNRMEIYVLA LSQHRRGVKEV TEWMSKTSGI PVSEICQHRF LLYNKDVTQH IFEVSAGLDS LVLGEGQILA
QVKQVVKGQ GVNGFGRNIS GLFKHAITVG KRVRTETNIA AGAVSVSSAA VELALMKLPE SSHASSARML
VVGAGKMGKL VIKHLVAKGC TKMVVVNRSE EKVAAVRNEM PPGVEIYKP LDEMLSCAAE ADVVFTSTAS
ETPLFLKEQV ETLPPVRDAR LFVDISVPRN VGSCVAEIDG TRVFNVDDLK EVVAANKEDR VRKAMDAQAI
ITDESKHFEA WRDSLETVPT IKKLRGYTER IIAAEIEKSL PKMGIDMNKK MRKTVDDLIR GIVNKLLHGP
MQHLRCGDND SRTLSETLDN MQALNRMYGL DAEILEEKIR AKVEKK

Sequence Positions

65-530, 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

58,292 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

Glutamyl-tRNA reductase

NCBI Accession

NP_172465.1

NCBI GI

15218333

NCBI GenBank Nucleotide

NM_100868.3

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

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NCBI Gene ID
837528

NCBI Official Full Name

Glutamyl-tRNA reductase family protein

NCBI Official Symbol

HEMA2

NCBI Official Synonym Symbols

F21M12.33; F21M12_33

NCBI Protein Information

Glutamyl-tRNA reductase family protein

NCBI Summary

Encodes glutamyl-tRNA reductase. Involved in heme biosynthesis in non-photosynthetic tissues and induced by oxidative stress in photosynthetic tissues to supply heme for defensive hemoproteins

UniProt Gene Name

HEMA2

UniProt Synonym Gene Names

GluTR

UniProt Protein Name

Glutamyl-tRNA reductase 2, chloroplastic

UniProt Primary Accession

P49294

UniProt Secondary Accession

O04950; Q0WQP1; Q4V3B7

UniProt Related Accession

P49294

UniProt Comments

Catalyzes the NADPH-dependent reduction of glutamyl-tRNA(Glu) to glutamate 1-semialdehyde (GSA). Probably involved in wound-induced supply of heme to defensive hemoproteins outside plastids.

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