Recombinant human PTS protein

Catalog Number: ATGP0452

PRODUCT INFORMATION

Expression system
E.coli

Domain
1-145aa

UniProt No.
Q03393

NCBI Accession No.
NP_000308

Alternative Names
6-pyruvoyltetrahydropterin synthase, PTPS, PTP synthase, 6-pyruvoyltetrahydropterin synthase 6 pyruvoyl tetrahydrobiopterin synthase, 6 pyruvoyl tetrahydropterin synthase, 6 pyruvoyltetrahydropterin synthase, EC 4.2.3.12, FLJ97081,

PRODUCT SPECIFICATION

Molecular Weight
18.5 kDa (165aa) confirmed by MALDI-TOF

Concentration
1mg/ml (determined by Bradford assay)

Formulation
Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 20% glycerol

Purity
> 90% by SDS-PAGE

Tag
His-Tag

Application
SDS-PAGE

Storage Condition
Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description
6-Pyruvoyltetrahydropterin synthase (PTS), also known as PTPS, belongs to the family of lyases, specifically those carbon-oxygen lyases acting on phosphates. The enzyme encoded by this gene catalyzes the elimination of inorganic triphosphate from dihydroneopterin triphosphate, which is the second and irreversible step in the biosynthesis of tetrahydrobiopterin from GTP. Tetrahydrobiopterin, also known as BH (4), is an essential cofactor

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and regulator of various enzyme activities, including enzymes involved in serotonin biosynthesis and NO synthase activity. Mutations in this gene result in hyperphenylalaninemia. Recombinant human PTS, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

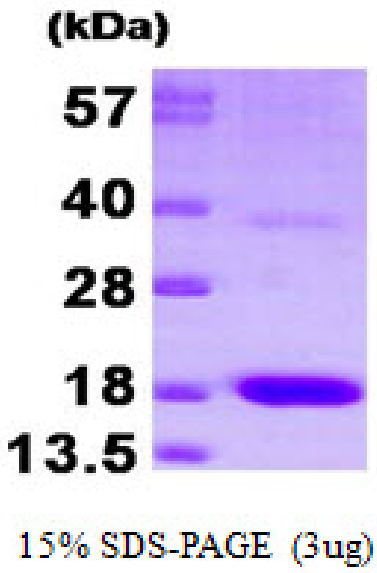
MGSSHHHHHH SSGLVPRGSH MSTEGGGRRC QAQVSRRISF SASHRLYSKF LSDEENLKLF GKCNNPNGHG HNYKVVVTVH GEIDPATGMV MNLADLKKYM EEAIMQPLDH KNLDMDVPYF ADVVSTTENV AVYIWDNLQK VLPVGVLYKV KVYETDNNIV VYKGE

General References

Thony B., et al. (1992) Biochem Biophys Res Commun. 189:1437-43.
Milstien S., et al. (1989) J Biol Chem. 264(14):8066-73.

DATA

SDS-PAGE



15% SDS-PAGE (3ug)

3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.