

Recombinant Human Geranylgeranyl Diphosphate Synthase 1, His-tagged

Cat. No. GGPS1-2800H Lot. No. (See product label)

SPECIFICATION

Product Overview Recombinant human GGPS1 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques. MW = 37 kDa (320aa), confirmed by MALDI-TOF.

Species Human

Source E.coli

Description Geranylgeranyl pyrophosphate synthase isoform A, also known as GGPS1, is a member of the prenyltransferase family. Predominantly expressed in testis, heart and skeletal muscle, GGPS1 localizes to the cytoplasm and catalyzes the formation of geranylgeranyl pyrophosphate, a precursor of geranylgeranylated proteins and carotenoids. GGPS1 is an important molecule responsible for the C20-prenylation of proteins and for the regulation of a nuclear hormone receptor.

Sequences Of Amino Acids

MGSSHHHHHH SGLVPRGSH MEKTQETVQR ILLEPYKYLQ LPLGKQVVRTK
 LSQAFNHWLK VPEDKLQIII EVTEMLHNAS LLIDDIEDNS KLRRGFPVAH
 SIYGIPSVIN SANYVYFLGL EKVLTLDHPD AVKLFTRQLL ELHQGGGLDI
 YWRDNYTCPT EEEYKAMVLQ KTGGLFGLAV GLMQLFSDYK EDLKPLLNTL
 GLFFQIRDDY ANLHSKEYSE NKSFCEDLTE GKFSFPTIHA IWSRPESTQV
 QNILRQRTE IDIKKYCVHY LEDVGSFEYT RNTLKELEAK AYKQIDARGG
 NPELVALVKH LSKMFKEENE

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Purity	> 90% by SDS – PAGE.
Form	Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 10% glycerol.
Concentration	1mg/ml (determined by Bradford assay).
Storage	Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

GENE INFORMATION

Gene Name	GGPS1 geranylgeranyl diphosphate synthase 1 [Homo sapiens]
Synonyms	GGPS1; geranylgeranyl diphosphate synthase 1; GGPPS; GGPPS1; geranylgeranyl pyrophosphate synthase; GGPPSase; GGPP synthase; OTTHUMP00000216161; OTTHUMP00000216162; OTTHUMP00000216163; OTTHUMP00000216164; EC 2.5.1.1; EC 2.5.1.10; EC 2.5.1.29; Dimethylallyltranstransferase; Geranyltranstransferase; Farnesyltranstransferase; Geranylgeranyl diphosphate synthase
Gene ID	9453
mRNA Refseq	NM_001037277
Protein Refseq	NP_001032354
MIM	606982
UniProt ID	O95749
Chromosome	1q43

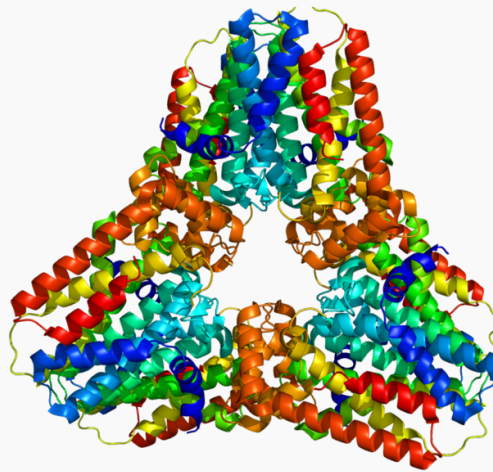
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Location**Pathway**

Metabolic pathways; Terpenoid backbone biosynthesis

Functiondimethylallyltranstransferase activity; farnesyltranstransferase activity;
geranyltranstransferase activity; metal ion binding; transferase activity**PDB rendering based
on 2fvi.** Tel: 1-631-559-9269 1-516-512-3133 Email: info@creative-biomart.com  Fax: 1-631-938-8127 45-1 Ramsey Road, Shirley, NY 11967, USA