

Geranylgeranyl pyrophosphate synthase Recombinant Protein | GGPS1 recombinant protein

Recombinant Human Geranylgeranyl pyrophosphate synthase

CATALOG # AAA18657	HOST E Coli or Yeast or Baculovirus or Mammalian Cell
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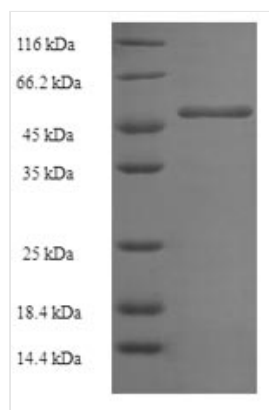
PRODUCT SYNONYMS

Geranylgeranyl pyrophosphate synthase; Recombinant Human Geranylgeranyl pyrophosphate synthase; (2E; 6E)-farnesyl diphosphate synthase; Dimethylallyltranstransferase (EC:2.5.1.1); Farnesyl diphosphate synthase; Farnesyltranstransferase (EC:2.5.1.29); Geranylgeranyl diphosphate synthase; Geranyltranstransferase (EC:2.5.1.10); GGPS1 recombinant protein

PRODUCT SPECIFICATIONS

Host	E Coli or Yeast or Baculovirus or Mammalian Cell
Purity/Purification	Greater or equal to 85% purity as determined by SDS-PAGE.
Form/Format	Lyophilized or liquid (Format to be determined during the manufacturing process)
Sequence Positions	1-300aa; Full Length Protein
Sequence	MEKTQETVQR ILLEPYKYLL QLPGKQVRTK LSQAFNHWLK VPEDKLQIII EVTEMLHNAS LLIDDIEDNS KLRRGFPVAH SIYGIPSVIN SANYVYFLGL EKVLTLDHPD AVKLFTRQLL ELHQQGGLDI YWRDNYTCPT EEEYKAMVLQ KTGGLFGLAV GLMQLFSDYK EDLKPLLNTL GLFFQIRDDY ANLHSKEYSE NKSFCEDLTE GKFSFPTIHA IWSRPESTQV QNLRQR TEN IDIKKYCVHY LEDVGSFEYT RNTLKELEAK AYKQIDARGG NPELVALVKH LSKMFKEENE
Preparation and Storage	Store at -20 degree C, for extended storage, conserve at -20 degree C or -80 degree C.

IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for GGPS1 recombinant protein	Catalyzes the trans-addition of the three molecules of IPP onto DMAPP to form geranylgeranyl pyrophosphate, an important precursor of carotenoids and geranylated proteins.
Product Categories/Family for GGPS1 recombinant protein	Cancer

References

Human geranylgeranyl diphosphate synthase isolation of the cDNA, chromosomal mapping and tissue expression. Ericsson J., Greene J.M., Carter K.C., Shell B.K., Duan D.R., Florence C., Edwards P.A.J. *Lipid Res.* 39:1731-1739(1998) Human geranylgeranyl diphosphate synthase. cDNA cloning and expression. Kuzuguchi T., Morita Y., Sagami I., Sagami H., Ogura K.J. *Biol. Chem.* 274:5888-5894(1999) Study on isolation of a geranylgeranyl pyrophosphate (GGPP) synthase cDNA and its expression -- development of a new assay system of gene functions. Misawa N., Okazaki H., Noguchi Y., Tatsuno I., Saito Y., Yasuda T., Hirai A. *Proc. Jpn. Conf. Biochem. Lipids* 41:293-296(1999) Gene expression profiling in the human hypothalamus-pituitary-adrenal axis and full-length cDNA cloning. Hu R.-M., Han Z.-G., Song H.-D., Peng Y.-D., Huang Q.-H., Ren S.-X., Gu Y.-J., Huang C.-H., Li Y.-B., Jiang C.-L., Fu G., Zhang Q.-H., Gu B.-W., Dai M., Mao Y.-F., Gao G.-F., Rong R., Ye M., Zhou J., Xu S.-H., Gu J., Shi J.-X., Jin W.-R., Zhang C.-K., Wu T.-M., Huang G.-Y., Chen Z., Chen M.-D., Chen J.-L. *Proc. Natl. Acad. Sci. U.S.A.* 97:9543-9548(2000) Identification of the GGPS1 genes encoding geranylgeranyl diphosphate synthases from mouse and human. Kainou T., Kawamura K., Tanaka K., Matsuda H., Kawamukai M. *Biochim. Biophys. Acta* 1437:333-340(1999) Molecular cloning and expression analysis of a novel human cDNA encoding a protein homologous to *Neurospora crassa* geranylgeranyl pyrophosphate synthetase. Zhang M., Yu L., Hu P., Bi A., Zhang Q., Xu M., Zhao S. Complete sequencing and characterization of 21,243 full-length human cDNAs. Ota T., Suzuki Y., Nishikawa T., Otsuki T., Sugiyama T., Irie R., Wakamatsu A., Hayashi K., Sato H., Nagai K., Kimura K., Makita H., Sekine M., Obayashi M., Nishi T., Shibahara T., Tanaka T., Ishii S., Yamamoto J., Saito K., Kawai Y., Isono Y., Nakamura Y., Nagahara K., Murakami K., Yasuda T., Iwayanagi T., Wagatsuma M., Shiratori A., Sudo H., Hosoiri T., Kaku Y., Kodaira H., Kondo H., Sugawara M., Takahashi M., Kanda K., Yokoi T., Furuya T., Kikkawa E., Omura Y., Abe K., Kamihara K., Katsuta N., Sato K., Tanikawa M., Yamazaki M., Ninomiya K., Ishibashi T., Yamashita H., Murakawa K., Fujimori K., Tanai H., Kimata M., Watanabe M., Hiraoka S., Chiba Y., Ishida S., Ono Y., Takiguchi S., Watanabe S., Yosida M., Hotuta T., Kusano J., Kanehori K., Takahashi-Fujii A., Hara H., Tanase T.-O., Nomura Y., Togiya S., Komai F., Hara R., Takeuchi K., Arita M., Imose N., Musashino K., Yuuki H., Oshima A., Sasaki N., Aotsuka S., Yoshikawa Y., Matsunawa H., Ichihara T., Shiohata N., Sano S., Moriya S., Momiyama H., Satoh N., Takami S., Terashima Y., Suzuki O., Nakagawa S., Senoh A., Mizoguchi H., Goto Y., Shimizu F., Wakebe H., Hishigaki H., Watanabe T., Sugiyama A., Takemoto M., Kawakami B., Yamazaki M., Watanabe K., Kumagai A., Itakura S., Fukuzumi Y., Fujimori Y., Komiyama M., Tashiro H., Tanigami A., Fujiwara T., Ono T., Yamada K., Fujii Y., Ozaki K., Hirao M., Ohmori Y., Kawabata A., Hikiji T., Kobatake N., Inagaki H., Ikema Y., Okamoto S., Okitani R., Kawakami T., Noguchi S., Itoh T., Shigeta K., Senba T., Matsumura K., Nakajima Y., Mizuno T., Morinaga M., Sasaki M., Togashi T., Oyama M., Hata H., Watanabe M., Komatsu T., Mizushima-Sugano J., Satoh T., Shirai Y., Takahashi Y., Nakagawa K., Okumura K., Nagase T., Nomura N., Kikuchi H., Masuho Y., Yamashita R., Nakai K., Yada T., Nakamura Y., Ohara O., Isogai T., Sugano S. *Nat. Genet.* 36:40-45(2004) The DNA sequence and biological annotation of human chromosome 1. Gregory S.G., Barlow K.F., McLay K.E., Kaul R., Swarbreck D., Dunham A., Scott C.E., Howe K.L., Woodfine K., Spencer C.C.A., Jones M.C., Gillson C., Searle S., Zhou Y., Kokocinski F., McDonald L., Evans R., Phillips K., Atkinson A., Cooper R., Jones C., Hall R.E., Andrews T.D., Lloyd C., Ainscough R., Almeida J.P., Ambrose K.D., Anderson F., Andrew R.W., Ashwell R.I.S., Aubin K., Babbage A.K., Baggeley C.L., Bailey J., Beasley H., Bethel G., Bird C.P., Bray-Allen S., Brown J.Y., Brown A.J., Buckley D., Burton J., Bye J., Carder C., Chapman J.C., Clark S.Y., Clarke G., Clee C., Cobley V., Collier R.E., Corby N., Coville G.J., Davies J., Deadman R., Dunn M., Earthrowl M., Ellington A.G., Errington H., Frankish A., Frankland J., French L., Garner P., Garnett J., Gay L., Ghorri M.R.J., Gibson R., Gilby L.M., Gillett W., Glithero R.J., Grafham D.V., Griffiths C., Griffiths-Jones S., Grocock R., Hammond S., Harrison E.S.I., Hart E., Haugen E., Heath P.D., Holmes S., Holt K., Howden P.J., Hunt A.R., Hunt S.E., Hunter G., Isherwood J., James R., Johnson C., Johnson D., Joy A., Kay M., Kershaw J.K., Kibukawa M., Kimberley A.M., King A., Knights A.J., Lad H., Laird G., Lawlor S., Leongamornlert D.A., Lloyd D.M., Loveland J., Lovell J., Lush M.J., Lyne R., Martin S., Mashreghi-Mohammadi M., Matthews L., Matthews N.S.W., McLaren S., Milne S., Mistry S., Moore M.J.F., Nickerson T., O'Dell C.N., Oliver K., Palmeiri A., Palmer S.A., Parker A., Patel D., Pearce A.V., Peck A.I., Pelan S., Phelps K., Phillimore B.J., Plumb R., Rajan J., Raymond C., Rouse G., Saenphimmachak C., Sehra H.K., Sheridan E., Shownkeen R., Sims S., Skuce C.D., Smith M., Steward C., Subramanian S., Sycamore N., Tracey A., Tromans A., Van Helmond Z., Wall M., Wallis J.M., White S., Whitehead S.L., Wilkinson J.E., Willey D.L., Williams H., Wilming L., Wray P.W., Wu Z., Coulson A., Vaudin M., Sulston J.E., Durbin R.M., Hubbard T., Wooster R., Dunham I., Carter N.P., McVean G., Ross M.T., Harrow J., Olson M.V., Beck S., Rogers J., Bentley D.R. *Nature* 441:315-321(2006) Mural R.J., Istrail S., Sutton G., Florea L., Halpern A.L., Mobarry C.M., Lippert R., Walenz B., Shatkay H., Dew I., Miller J.R., Flanigan M.J., Edwards N.J., Bolanos R., Fasulo D., Halldorsson B.V., Hannenhalli S., Turner R., Yooseph S., Lu F., Nusskern D.R., Shue B.C., Zheng X.H., Zhong F., Delcher A.L., Huson D.H., Kravitz S.A., Mouchard L., Reinert K., Remington K.A., Clark A.G., Waterman M.S., Eichler E.E., Adams M.D., Hunkapiller M.W., Myers E.W., Venter J.C. Initial characterization of the human central proteome. Burkard T.R., Planayavsky M., Kaupé I., Breitwieser F.P., Buerckstuehmer T., Bennett K.L., Superti-Furga G., Colinge J. *BMC Syst. Biol.* 5:17-17(2011) N-terminal acetylome analyses and functional insights of the N-terminal acetyltransferase NatB. Van Damme P., Lasa M., Polevoda B., Gazquez C., Elosegui-Artola A., Kim D.S., De Juan-Pardo E., Demeyer K., Hole K., Larrea E., Timmerman E., Prieto J., Arnesen T., Sherman F., Gevaert K., Aldabe R. *Proc. Natl. Acad. Sci. U.S.A.* 109:12449-12454(2012) The crystal structure of human geranylgeranyl pyrophosphate synthase reveals a novel hexameric arrangement and inhibitory product binding. Kavanagh K.L., Dunford J.E., Bunkoczi G., Russell R.G., Oppermann U.J. *Biol. Chem.* 281:22004-22012(2006)

NCBI AND UNIPROT INFORMATION

NCBI GI #	83700220
NCBI GeneID	9453
NCBI Accession #	NP_001032354.1
NCBI GenBank Nucleotide #	NM_001037277.1
UniProt Accession #	O95749; Q5T2C8; Q6NW19; A8MVQ8
Molecular Weight	50.9 kDa
NCBI Official Full Name	geranylgeranyl pyrophosphate synthase
NCBI Official Synonym Full Names	geranylgeranyl diphosphate synthase 1
NCBI Official Symbol	GGPS1
NCBI Official Synonym Symbols	GGPPS; GGPPS1
NCBI Protein Information	geranylgeranyl pyrophosphate synthase
UniProt Protein Name	Geranylgeranyl pyrophosphate synthase
UniProt Gene Name	GGPS1
UniProt Synonym Gene Names	GGPP synthase; GGPPSase
UniProt Entry Name	GGPPS_HUMAN

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AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
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