

GGPS1 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP2419a**Specification**

GGPS1 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession [O95749](#)
Other Accession [NP_004828](#)

GGPS1 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 9453

Other Names

Geranylgeranyl pyrophosphate synthase, GGPP synthase, GGPPSase, 251-, (2E, 6E)-farnesyl diphosphate synthase, Dimethylallyltranstransferase, Farnesyl diphosphate synthase, Farnesyltranstransferase, Geranylgeranyl diphosphate synthase, Geranyltranstransferase, GGPS1

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP2419a](/product/products/AP2419a) was selected from the N-term region of human GGPS1 . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

GGPS1 Antibody (N-term) Blocking Peptide - Protein Information

Name GGPS1

Function

Catalyzes the trans-addition of the three molecules of IPP onto DMAPP to form geranylgeranyl pyrophosphate, an important precursor of carotenoids and geranylated proteins.

Cellular Location

Cytoplasm. Cytoplasm, perinuclear region. Cytoplasm, myofibril, sarcomere, Z line

Tissue Location

Abundantly expressed in testis (PubMed:9741684, PubMed:10026212). Found in other tissues to a lower extent (PubMed:9741684, PubMed:10026212). Expressed in dermal fibroblast and skeletal

muscle (PubMed:32403198).

GGPS1 Antibody (N-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

GGPS1 Antibody (N-term) Blocking Peptide - Images

GGPS1 Antibody (N-term) Blocking Peptide - Background

Geranylgeranyl diphosphate (GGPP) synthase (GGPS) catalyzes the synthesis of GGPP, a molecule responsible for the C20-prenylation of protein and for the regulation of a nuclear hormone receptor. The deduced 300-amino acid human protein contains 5 conserved domains consistent with prenyltransferases. Recombinant GGPS shows enzymatic properties associated with the synthesis of GGPP from farnesyl diphosphate and isopentenyl diphosphate. Mouse GGPS is regulated in several tissues in obesity and is induced during adipocyte differentiation. GGPS is increased 5- to 20-fold in skeletal muscle, liver, and fat of ob/ob mice. Western blot analysis detects a 2-fold overexpression of protein in muscle and fat but not in liver. Differentiation of mouse fibroblasts into adipocytes induces GGPS expression more than 20-fold.

GGPS1 Antibody (N-term) Blocking Peptide - References

Kainou, T., et al., Biochim. Biophys. Acta 1437(3):333-340 (1999). Kuzuguchi, T., et al., J. Biol. Chem. 274(9):5888-5894 (1999). Ericsson, J., et al., J. Lipid Res. 39(9):1731-1739 (1998).