Recombinant Human PSAP protein, GST-tagged

Cat. No. PSAP-18H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human PSAP(196 - 274 aa) fused with GST tag at N-terminal was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	196-274 a.a.
Description	This gene encodes a highly conserved glycoprotein which is a precursor for 4 cleavage products: saposins A, B, C, and D. Each domain of the precursor protein is approximately 80 amino acid residues long with nearly identical placement of cysteine residues and glycosylation sites. Saposins A-D localize primarily to the lysosomal compartment where they facilitate the catabolism of glycosphingolipids with short oligosaccharide groups. The precursor protein exists both as a secretory protein and as an integral membrane protein and has neurotrophic activities. Mutations in this gene have been associated with Gaucher disease, Tay-Sachs disease, and metachromatic leukodystrophy. Alternative splicing results in multiple transcript variants encoding different isoforms.
Form	Protein lyophilized in sterile PBS (58 mM Na2HPO4, 17 mM NaH2PO4, 68 mM NaCl, 100 mM GSH, pH 8.0). Trehalose (5-8%) and mannitol (5-8%) protectants were added before lyophilization.
Molecular Mass	35 kDa

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AA Sequence	DVCQDCIQMVTDIQTAVRTNSTFVQALVEHVKEECDRLGPGMADICKNYISQYSEIAI QMMMHMQPKEICALVGF CDEV
Purity	> 95%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Stability	Store for up to 12 months at -20 centigradeto -80 centigradeas lyophilized powder.
Storage	Short-term storage: Store at 2-8 centigradefor two weeks.Long-term storage: Aliquot and store at -20 centigradeto -80 centigradefor up to 6 months, buffer containing 50% glycerol is recommended for reconstitution. Avoid repeat freeze-thaw cycles.
Reconstitution	Reconstitute at 0.25 g/µl in 200 µl sterile water for short-term storage.Reconstitution with 200 µl 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details).If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used).Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.

GENE INFORMATION

Gene Name	PSAP prosaposin [Homo sapiens]
Official Symbol	PSAP
Synonyms	PSAP; prosaposin; GLBA, SAP1, sphingolipid activator protein 1; proactivator polypeptide; variant Gaucher disease and variant metachromatic leukodystrophy; sphingolipid activator protein-1; GLBA; SAP1; FLJ00245; MGC110993;
Gene ID	5660

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mRNA Refseq	NM_002778
Protein Refseq	NP_002769
MIM	176801
UniProt ID	P07602
Chromosome Location	10q21-q22
Pathway	Glycosphingolipid metabolism, organism-specific biosystem; Hemostasis, organism-specific biosystem; Lysosome, organism-specific biosystem; Lysosome, conserved biosystem; Metabolism, organism-specific biosystem; Metabolism of lipids and lipoproteins, organism-specific biosystem; Platelet activation, signaling and aggregation, organism-specific biosystem;
Function	enzyme activator activity; lipid binding;

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