

PRODUCT DATASHEET

SAP Protein Human HEK293

Cat. No.: RD172338100

Type: Recombinant protein

Size: 0.1 mg

Source: HEK293

Species: Human

Description

Total 518 AA, UniProt P07602 (Gly17-Asn524). MW: 57.7 kDa (calculated), migrates at ~ 65 kDa, alt. at ~ 25 kDa (disaposins) or ~ 35 kDa (trisaposins) on SDS PAGE; N-terminal linker (2 extra AA), C-terminal linker (2 extra AA) and C-terminal His-tag (6 extra AA). Protein identity confirmed by LC-MS/MS.

Other names

Proactivator polypeptide, Prosaposin, PSAP

Introduction to the molecule

Prosaposin is a precursor of four lysosomal saposin proteins (saposin A, B, C and D). Saposins are heat-stable glycoproteins that facilitate the catabolism of glycosphingolipids with short oligosaccharide groups. It stimulates neurite outgrowth and increases choline acetyltransferase activity. Secreted prosaposin is presumed to have additional functions in human milk, cerebrospinal fluid and seminal plasma.

Research topic

Animal studies, Others

Amino Acid sequence

ASGPVLGLKE CTRGSAVWCQ NVKTASDCGA VKHCLQTVWN KPTVKSLPCD ICKDVVTAAG DMLKDNATEE EILVYLEKTC DWLPKPNMSA
SCKEIVDSYL PVILDIIKGE MSRPGEVCSA LNLCESLQKH LAELNHQKQL ESNKIPELDM TEVVAPFMAN IPLLLYPQDG PRSKPQPKDN
GDVCQDCIQM VTDIQTAVRT NSTFVQALVE HVKEECDRLG PGMADICKNY ISQYSEIAIQ MMMHMQPKEI CALVGFCEDEV KEMPMQTLVP
AKVASKNVIP ALELVEPIKK HEVPAKSDVY CEVCEFLVKE VTKLIDNNT EKEILDADFCK MCSKLPKSL EECQEVVDY GSSILSILLE
EVSPPELVCSM LHLCSGTRLP ALTVHVTQPK DGGFCEVCKK LVGYLDRNLE KNSTKQEILA ALEKGCFLP DPYQKQCDQF VAEYEPVLIE
ILVEVMDPSF VCLKIGACPS AHKPLLGTEK CIWGPSYWCQ NTETAAQCNA VEHCKRHWWN KLHHHHHHH

Purity

Purity as determined by densitometric image analysis: >95%

Endotoxin

< 0.1 EU/μg

Formulation:

Filtered (0.4 μm) and lyophilized from 0.5 mg/ml solution in phosphate buffered saline, pH 7.4

Reconstitution:

Add deionized water to prepare a working stock solution of 0.5 mg/mL and let the lyophilized pellet dissolve completely. Product is not sterile! Please filter the product by an appropriate sterile filter before using it in the cell culture.

Shipping

At ambient temperature. Upon receipt, store the product at the temperature recommended below.

Storage, Stability/Shelf Life

Store lyophilized protein at -80°C . Lyophilized protein remains stable until the expiry date when stored at -80°C . Aliquot reconstituted protein to avoid repeated freezing/thawing cycles and store at -80°C for long term storage. Reconstituted protein can be stored at 4°C for a week.

Quality control

BCA to determine quantity of the protein.

SDS PAGE to determine purity of the protein.

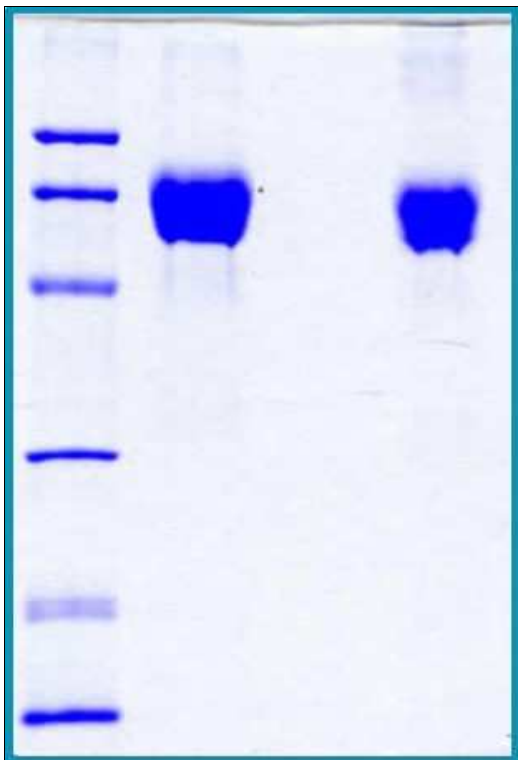
LAL to determine quantity of endotoxin.

Applications

Cell culture and/or animal studies, ELISA, Western blotting

Note

This product is intended for research use only.



12% SDS-PAGE separation of Human PSAP:

1. M.W. marker – 97, 66, 45, 31, 21, 14 kDa
2. reduced and boiled sample, 2.5 μg / lane
3. non-reduced and non-boiled sample, 2.5 μg / lane