Recombinant human SPG21 protein

Catalog Number: ATGP0287

PRODUCT INFORMATION

Expression system
E.coli

Domain
1-308aa

UniProt No.
Q9NZD8

NCBI Accession No.
NP_057714

Alternative Names
Spastic paraplegia 21 isoform a, ACP33, BM-019, GL010, Maspardin, MAST, Spastic paraplegia 21 isoform a Acid cluster protein 33, BM019, Spastic paraplegia 21 autosomal recessive Mast syndrome protein, SPG21.

PRODUCT SPECIFICATION

Molecular Weight
37.1 kDa (328aa) confirmed by MALDI-TOF

Concentration
1mg/ml (determined by Bradford assay)

Formulation
Liquid in. 20mM Tris-HCl buffer (pH 8.0)

Purity
> 95% by SDS-PAGE

Endotoxin level
< 1 EU per 1ug of protein (determined by LAL method)

Tag
His-Tag

Application
SDS-PAGE

Storage Condition
Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description
Spastic paraplegia 21 (SPG21), also known as Maspardin, binds to the hydrophobic C-terminal amino acids of CD4 and may play a role as a negative regulatory factor in CD4-depenent T-cell activation. This protein is widely expressed in various tissues including heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas.

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Mutations in SPG21 cause Mast syndrome, an autosomal-recessive complicated form of hereditary spastic paraplegia characterized by dementia, thin corpus callosum and white matter abnormalities. Recombinant human SPG21 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography.

Amino acid Sequence

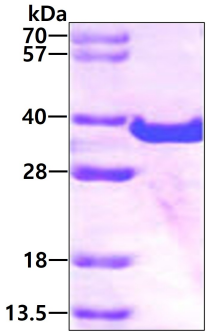
<MGSSHHHHHH SSGLVPRGSH> MGEIKVSPDY NWFRGTVPLK KIIVDDDDSK IWSLYDAGPR SIRCPLIFLP PVSGTADVFF RQILALTGWG YRVIALQYPV YWDHLEFCDG FRKLLDHLQL DKVHLFGASL GGFLAQKFAE YTHKSPRVHS LILCNSFSDT SIFNQTWTAN SFWLMPAFML KKIVLGNFSS GPVDPMMADA IDFMVDRLES LGQSELASRL TLNCQNSYVE PHKIRDIPVT IMDVFDQSAL STEAKEEMYK LYPNARRAHL KTGGNFPYLC RSAEVNLYVQ IHLLQFHGTK YAAIDPSMVS AEELEVQKGS LGISQEEQ

General References

Simpson MA., et al. (2003). Am J Hum Genet. 73(5):1147-56.
Zeitlmann L., et al. (2001). J Biol Chem. 276(12):9123-32.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.