

## Instruction manual FOR RESEARCH USE ONLY NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

## SPG21, 1-308 aa, Human, His-tagged, Recombinant, E.coli

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3th Edition

**Synonyms:**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.

**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. 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.

Form:Liquid. In 20 mM Tris-HCl buffer (pH 8.0)

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

## Sequences:

MGSSHHHHHHSSGLVPRGSHMGEIKVSPDYNWFRGTVPLKKIIVDDDDSKIWSLYDAGPRSIRCPLIFLPPVSGTAD VFFRQILALTGWGYRVIALQYPVYWDHLEFCDGFRKLLDHLQLDKVHLFGASLGGFLAQKFAEYTHKSPRVHSLILC NSFSDTSIFNQTWTANSFWLMPAFMLKKIVLGNFSSGPVDPMMADAIDFMVDRLESLGQSELASRLTLNCQNSYVE PHKIRDIPVTIMDVFDQSALSTEAKEEMYKLYPNARRAHLKTGGNFPYLCRSAEVNLYVQIHLLQFHGTKYAAIDPSM VSAEELEVQKGSLGISQEEQ

Purity:> 95% by HPLC

Concentration: 1 mg/ml (determined by Bradford assay)

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

**Storage:**Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

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