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Datasheet for ABIN7194321 **ATL1 Protein (GST tag)**

Overview

Quantity:	100 µg
Target:	ATL1
Origin:	Human
Source:	Baculovirus infected Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ATL1 protein is labelled with GST tag.

Product Details

Purpose:	Recombinant Human ATL1/SPG3A/Atlastin-1 Protein (GST Tag)
Sequence:	Met 1-Thr 447
Characteristics:	A DNA sequence encoding the human SPG3A (NP_056999.2) (Met 1-Thr 447) was fused with the GST tag at the N-terminus.
Purity:	> 80 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.

Target Details

Target:	ATL1
Alternative Name:	ATL1/SPG3A/Atlastin-1 (ATL1 Products)
Background:	Background: Atlastin-1, also known as Spastic paraplegia 3 protein A, Guanine nucleotide-binding protein 3, GTP-binding protein 3, GBP3, ATL1 and SPG3A, is a multi-pass membrane protein which belongs to the GBP family and atlastin subfamily. ATL1 / SPG3A is expressed

Target Details

predominantly in the adult and fetal central nervous system. Expression of ATL1 / SPG3A in adult brain is at least 50-fold higher than in other tissues. ATL1 / SPG3A is detected predominantly in pyramidal neurons in the cerebral cortex and the hippocampus of the brain. ATL1 / SPG3A is also expressed in upper and lower motor neurons (at protein level). A distinguishing feature of ATL1 / SPG3A is its frequent early onset, raising the possibility that developmental abnormalities may be involved in its pathogenesis. Missense SPG3A mutant atlastin-1 proteins have impaired GTPase activity and may act in a dominant-negative, loss-of-function manner by forming mixed oligomers with wild-type atlastin-1. Defects in ATL1 / SPG3A are the cause of spastic paraplegia autosomal dominant type 3 (SPG3), also known as Strumpell-Lorain syndrome. Spastic paraplegia is a degenerative spinal cord disorder characterized by a slow, gradual, progressive weakness and spasticity of the lower limbs. Synonym: AD-FSP;atlastin1;FSP1;GBP3;HSN1D;SPG3;SPG3A

Molecular Weight: 77 kDa

NCBI Accession: [NP_056999](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Please refer to the printed manual for detailed information.

Buffer: Lyophilized from sterile 50 mM Tris, 100 mM NaCl, 0.5 mM PMSF, 0.5 mM EDTA, 0.5 mM GSH, pH 8.0

Storage: 4 °C, -20 °C, -80 °C

Storage Comment: Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.