

Datasheet for ABIN7199468

Sortilin 1 Protein (SORT1) (His-Avi Tag, Biotin)



Overview

Quantity:	200 μg
Target:	Sortilin 1 (SORT1)
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Sortilin 1 protein is labelled with His-Avi Tag,Biotin.

Product Details

Purpose:	Biotinylated Human Sortilin / SORT1 Protein, His,Avitag™ (MALS verified)
Sequence:	Ser 78 - Asn 755
Characteristics:	Biotinylated Human Sortilin / SORT1, His, Avitag (SON-H82E9) is expressed from human 293 cells (HEK293). It contains AA Ser 78 - Asn 755 (Accession # Q99523-1).
Purity:	>95 % as determined by SDS-PAGE.
Endotoxin Level:	Less than 1.0 EU per μg by the LAL method.
Grade:	MALS verified

Target Details

Target:	Sortilin 1 (SORT1)
Alternative Name:	Sortilin / SORT1 (SORT1 Products)
Background:	Synonyms: Sortilin,SORT1,100 kDa NT receptor,Glycoprotein

95,Gp95,Gp95LDLCQ6,Neurotensin receptor 3,NT3NTR3,Ntr3,sortilin 1,

Description: The Sortilin is a sorting receptor in the Golgi compartment and as a clearance receptor on the cell surface. Required for protein transport from the Golgi apparatus to the lysosomes by a pathway that is independent of the mannose-6-phosphate receptor (M6PR). Lysosomal proteins bind specifically to the receptor in the Golgi apparatus and the resulting receptor-ligand complex is transported to an acidic prelysosomal compartment where the low pH mediates the dissociation of the complex. The receptor is then recycled back to the Golgi for another round of trafficking through its binding to the retromer. Also required for protein transport from the Golgi apparatus to the endosomes. Promotes neuronal apoptosis by mediating endocytosis of the proapoptotic precursor forms of BDNF (proBDNF) and NGFB (proNGFB). Also acts as a receptor for neurotensin. May promote mineralization of the extracellular matrix during osteogenic differentiation by scavenging extracellular LPL. Probably required in adipocytes for the formation of specialized storage vesicles containing the glucose transporter SLC2A4/GLUT4 (GLUT4 storage vesicles, or GSVs). These vesicles provide a stable pool of SLC2A4 and confer increased responsiveness to insulin. May also mediate transport from the endoplasmic reticulum to the Golgi.

Molecular Weight:

79.3 kDa

NCBI Accession:

NP_002950

Pathways:

Neurotrophin Signaling Pathway

Application Details

Application Notes:

This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™). The protein has a calculated MW of 79.3 kDa. The protein migrates as 90-100 kDa under reducing (R) condition due to glycosylation.

Comment:

Ready-to-use Avitag[™] biotinylated protein:

The product is exclusively produced using the Avitag™ technology. Briefly, a unique 15 amino acid peptide, the Avi tag, is introduced into the recombinant protein during expression vector construction. The single lysine residue in the Avi tag is enzymatically biotinylated by the E. Coli biotin ligase BirA.

This single-point enzymatic labeling technique brings many advantages for commonly used binding assays. The biotinylation happens on the lysine residue of Avi tag, and therefore does NOT interfere with the target protein's natural binding activities. In addition, when immobilized on an avidin-coated surface, the protein orientation is uniform because the position of the Avi

Application Details

	tag in the protein is precisely controlled.
Restrictions:	For Research Use only
Handling	
Format:	Lyophilized
Buffer:	PBS, pH 7.4
Storage:	-20 °C
Storage Comment:	-20°C