

Datasheet for ABIN7566363

Sortilin 1 Protein (SORT1) (AA 78-755) (His tag)[Go to Product page](#)

Overview

Quantity:	50 µg
Target:	Sortilin 1 (SORT1)
Protein Characteristics:	AA 78-755
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This Sortilin 1 protein is labelled with His tag.

Product Details

Purpose:	Sortilin (human) (rec.) (His)
Cross-Reactivity:	Human
Characteristics:	Human sortilin (aa 78-755) is fused at the C-terminus to a His-tag.
Purity:	>95 % (SDS-PAGE)
Endotoxin Level:	<0.01EU/µg purified protein (LAL test).
Biological Activity Comment:	Binds to human Progranulin (untagged) (Prod. No. AG-40A-0188Y). Binds only weakly to Progranulin with a Flag Tag at the C-terminus (Prod. No. AG-40A-068Y).

Target Details

Target:	Sortilin 1 (SORT1)
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Target Details

Alternative Name: Sortilin ([SORT1 Products](#))

Background: 100 kDa NT Receptor, Glycoprotein 95, Gp95, Neurotensin Receptor 3 , NT3, NTR3

Sortilin is a type I transmembrane multiligand receptor that is a member of the Vacuolar protein sorting 10 protein (Vps10p) domain receptor family. It is a 95 kDa protein, ubiquitously expressed, although most abundantly expressed in neurons, hepatocytes, adipocytes and white blood cells including macrophages. Sortilin is synthesized as a propeptide in the endoplasmic reticulum (ER) and processed to its mature form by furin-mediated cleavage in the trans-Golgi network. The primary function of sortilin is trafficking proteins from the Golgi to secretory vesicles and endolysosomal compartments. The majority of trafficking is from the Golgi to the endosomal compartment where sortilin deposits cargo targeted for catabolism in the lysosome and then is trafficked back to the Golgi via a retromer complex. At the cell surface, sortilin can remain intact and act as a receptor for extracellular ligands that can initiate signaling cascades or be internalized as a method of receptor-mediated endocytosis. Additionally, cell surface sortilin protein can undergo an additional cleavage that results in the release of the soluble form of the protein into the extracellular space. The sortilin receptor binds the nerve growth factor precursor (proNGF), neurotensin and Progranulin (PGRN), a secreted growth factor implicated in a multitude of processes ranging from regulation of inflammation to wound healing, tumorigenesis and neurological diseases. Sortilin controls PGRN trafficking and lysosomal degradation, but PGRN exerts its multiple functions independent of sortilin. Sortilin down-regulation via blocking antibodies is a key mechanism in increasing PGRN levels suggesting that sortilin is a potential target to correct PGRN reduction, such as that in patients with frontotemporal dementia (FTD) caused by GRN mutations.

Molecular Weight: ~100kDa (SDS-PAGE)

UniProt: [Q99523](#)

Pathways: [Neurotrophin Signaling Pathway](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: 1 mg/mL after reconstitution.

Concentration: 1 mg/mL

Handling

Buffer:	Contains PBS.
Handling Advice:	After opening, prepare aliquots and store at -20 °C. Avoid freeze/thaw cycles. Centrifuge lyophilized vial before opening and reconstitution.
Storage:	4 °C,-20 °C
Storage Comment:	Short Term Storage: +4°C Long Term Storage: -20°C Use & Stability: Stable for at least 6 months after receipt when stored at -20°C. Working aliquots are stable for up to 3 months when stored at -20°C.