

# Human SorCS1 Protein (His Tag)

Catalog Number: 11948-H08H



Sino Biological  
Biological Solution Specialist

## General Information

### Gene Name Synonym:

hSorCS

### Protein Construction:

A DNA sequence encoding the human SORCS1 (Q8WY21-1) extracellular domain (Ser 111-Ser 1099) was fused with a polyhistidine tag at the C-terminus and a signal peptide at the N-terminus

**Source:** Human

**Expression Host:** HEK293 Cells

## QC Testing

**Purity:** > 92 % as determined by SDS-PAGE

### Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

### Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

**Predicted N terminal:** Ser 111

### Molecular Mass:

The recombinant human SORCS1 consists of 1000 amino acids and predicts a molecular mass of 113 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of rhSORCS1 is approximately 130 kDa due to glycosylation

### Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

## Usage Guide

### Storage:

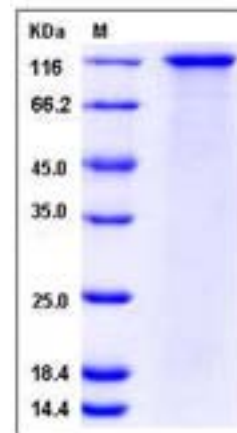
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## SDS-PAGE:



## Protein Description

VPS10 domain-containing receptor SorCS1, also known as SORCS1 and SORCS, is a single-pass type I membrane protein which belongs to the SORCS family and SORCS1 subfamily. SORCS1 contains five BNR repeats and one PKD domain. SorCS1 is a member of the Vps10p-domain receptor family comprised of Sortilin, SorCS1, SorCS2, SorCS3, and SorLA. The common characteristic of these receptors is an N-terminal Vps10p domain, which either represents the only module of the luminal/extracellular moiety or is combined with additional domains. Family members play roles in protein transport and signal transduction. The individual receptors bind and internalize a variety of ligands, such as neuropeptides and trophic factors, and Sortilin and SorLA mediate trans-Golgi network-to-endosome sorting. Their prominent neuronal expression, several of the identified ligands, and results support the notion that members of this receptor family have important functions in neurogenesis, plasticity-related processes, and functional maintenance of the nervous system. Sortilin and SorLA mediate intracellular protein trafficking and sorting. SorCS1 binds platelet-derived growth factor-BB (PDGF-BB) and is expressed in isoforms differing only in their cytoplasmic domains. SorCS1 binds platelet-derived growth factor, a growth factor crucial for pericyte recruitment to the microvasculature, and may thus have a role in expanding or maintaining the islet vasculature.

## References

1. Hermey, G. et al., 2001, Neurosci Lett. 313 (1-2): 83-7.
2. Clee, S.M. et al., 2006, Nat Genet. 38 (6): 688-93.
3. Goodarzi, M.O. et al., 2007, Diabetes. 56 (7): 1922-9.

Manufactured By Sino Biological Inc., FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

For US Customer: Fax: 267-657-0217 • Tel: 215-583-7898

Global Customer: Fax :+86-10-5862-8288 • Tel:+86-400-890-9989 • <http://www.sinobiological.com>