Recombinant Protein Technical Manual

Recombinant Human SorCS1 Protein (His Tag)

RPES4523

Product Data:

Product SKU: RPES4523

Size: 50µg

Species: Human

Expression host: HEK293 Cells

Uniprot: Q8WY21

Protein Information:

Molecular Mass: 113 kDa

AP Molecular Mass: 130 kDa

Tag: C-His

Bio-activity:

Purity: > 92 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: 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℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, pH 7.4

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

Application:

Synonyms: hSorCS;RP11-446H13.1

Immunogen Information:

Sequence: Ser 111-Ser 1099

Background:

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.