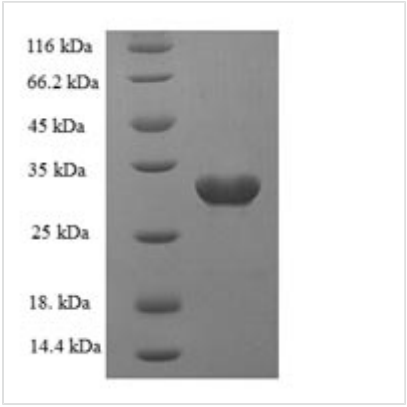
Recombinant Rat Sortilin (Sort1), partial

Product Code	CSB-EP022412RA
Relevance	Functions as 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). 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 domain matrix during osteogenic differentiation by scavenging Extracellular domain 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.
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	O54861
Alias	Glycoprotein 110 ;Gp110Neurotensin receptor 3 ;NTR3
Product Type	Recombinant Protein
Immunogen Species	Rattus norvegicus (Rat)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	CEENDYTTWLAHSTDPGDYKDGCILGYKEQFLRLRKSSVCQNGRDYVVAKQPSICPCSLEDFLCDFGYFRPENASECVEQPELKGHELEFCLYGKEEHLTTNGYRKIPGDRCQGGMNPAREVKDLKKKCTSNFLNPKKQNSKSSS
Lead Time	3-7 business days
Research Area	Others
Source	E.coli
Gene Names	Sort1
Expression Region	610-754aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-SUMO-tagged
Mol. Weight	32.5kDa
Protein Description	Partial
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The generation of the recombinant Rat Sort1 protein typically includes the following steps: synthesizing the recombinant plasmid containing the gene encoding the Rat Sort1 protein (610-754aa), transforming the recombinant plasmid into e.coli cells, selecting the positive e.coli cells, and culturing the positive e.coli cells for protein expression. The protein is equipped with a N-terminal 6xHis-SUMO tag. After expression, affinity purification is employed to isolate and purify the recombinant Sort1 protein from the cell lysate. Denaturing SDS-PAGE is utilized to resolve the resulting recombinant Rat Sort1 protein, revealing a purity level exceeding 90%.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.