

Product datasheet for TA328904

Sortilin (SORT1) Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: IHC, WB

Recommended Dilution: WB: 1:200-1:2000; IHC: 1:100-1:3000

Reactivity: Mouse, Rat

Host: Rabbit

Clonality: Polyclonal

Immunogen: Peptide DKDTTRRIHVSTDQD(C) corresponding to amino acid residues 320-335 of human

Sortilin . Extracellular domain.

Formulation: Lyophilized. Concentration before lyophilization ~0.8mg/ml (lot dependent, please refer to

CoA along with shipment for actual concentration). Buffer before lyophilization: Phosphate

buffered saline (PBS), pH 7.4, 1% BSA, 0.025% NaN3.

Reconstitution Method: Add 50 ul double distilled water (DDW) to the lyophilized powder.

Purification: Affinity purified on immobilized antigen.

Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Gene Name: sortilin 1

Database Link: NP 002950

Entrez Gene 6272 Human

Q99523



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Background:

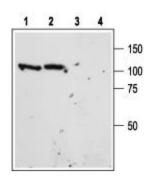
Sortilin is a member of the Vps10p family named for a yeast gene that is involved in trafficking between the trans-golgi network and the vacuole. In mammals sortilin has been shown to play an important role in golgi to endosome and golgi to lysosome trafficking. Sortilin is also known as neurotensin receptor 3 (NTS3), one of the receptors for the peptide neurotransmitter neurotensin that exerts several biological functions ranging from the regulation of dopamine transmission and pain in the central nervous system to its functioning as a local hormone affecting the gastrointestinal tract. In addition, sortilin has been lately identified as a co-receptor of p75NTRÂ for the binding of the proneurotrophins proNGF and proBDNF. Moreover, Sortilin expression was found to be essential for proNGF and proBDNF-induced neuronal cell death. Sortilin is a type I membrane protein with a large extracellular domain that includes 8 bacterial neuraminidase repeats (BNRs), a single transmembrane region and a short cytoplasmic tail. The protein is expressed in several tissues, most notably in brain, spinal chord, skeletal muscle and adipocytes.Paradoxically for its role as either a neurotensin receptor or a p75NTR co-receptor for proneurotrophins, about 90% of sortilin is retained in intracellular compartments with only about 10% reaching the cell surface. It has been speculated, that changes in the cellular environment may increase cell surface expression of sortilin. We have now developed a new anti-Sortilin antibody directed at the extracellular region of the human sortilin protein. The antibody will recognize human rat and mouse samples.

Synonyms: Gp95; LDLCQ6; NT3; NTR3

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Lysosome, Neurotrophin signaling pathway

Product images:



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Western blot analysis of mouse (lanes 1 and 3) and rat (lanes 2 and 4) brain lysate: 1, 2. Anti-Sortilin (extracellular) antibody, (1:400). 3, 4. Anti-Sortilin (extracellular) antibody, preincubated with the control peptide antigen.

Expression of Sortilin in rat neocortex. Immunohistochemical staining of rat neocortex with Anti-Sortilin (extracellular) antibody. A. Sortilin appears in cortical neurons (red). B. Staining of interneurons with mouse antiparvalbumin (PV, green). C. Confocal merge of Sortilin and PV demonstrates separate localization in neocortex.