



Anti-Sortilin (C-terminal) monoclonal antibody, clone 5F4.2 (CABT-B1343)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	Expected to react with both spliced isoforms reported by UniProt (Q99523).
Immunogen	GST-tagged recombinant human Sortilin C-terminal fragment.
Isotype	IgG1, κ
Source/Host	Mouse
Species Reactivity	Human, Mouse
Clone	5F4.2
Purification	Protein G Purified
Conjugate	Unconjugated
Applications	WB, IHC-P
Epitope	C-terminal region.
Molecular Weight	~92 kDa observed. Target band size appears larger than the calculated molecular weights of 83.86 kDa (isoform 1) and 69.17 kDa (isoform 2) due to glycosylation. Uncharacterized band(s) may appear in some lysates.
Format	Liquid
Concentration	Please refer to lot specific datasheet.
Size	100 μ g
Buffer	0.1 M Tris-Glycine (pH 7.4), 150 mM NaCl with 0.05% sodium azide.
Preservative	0.05% Sodium Azide
Storage	Stable for 1 year at 2-8°C from date of receipt.

BACKGROUND

Introduction Sortilin (UniProt Q99523; also known as 100 kDa NT receptor, Glycoprotein 95, Gp95,

Neurotensin receptor 3, NT3, NTR3) is encoded by the SORT1 (also known as LDLCQ6, NT3) gene (Gene ID 6272) in human. Sortilin belongs to the a family of sorting receptors characterized by the Vps10p domain that creates a tunnel cavity with its ten-bladed β -propeller for the binding of soluble ligands. The family members also contain a short cytoplasmic tail that harbors recognition motifs for subcellular sorting adaptor proteins. Sortilin is reported to bind PCSK9 in the trans-Golgi network with high-affinity in HepG2 cells. Sort1 knockout mice exhibit reduced PCSK9 plasma concentration and altered PCSK9 subcellular localization in hepatocytes. Sortilin is also found to colocalize with APP in neurites and facilitates APP processing toward the production of sAPP α , possibly by optimizing APP as a substrate for α -secretase cleavage. Sortilin is initially produced with a signal peptide (a.a. 1-33) and a propeptide (a.a. 34-77) sequence, the removal of which yields the mature receptor (a.a. 78-831) with a large luminal/extracellular (a.a. 78-555) portion, a transmembrane region (a.a. 756-778), and a short cytoplasmic tail (a.a.779-831). Similar to the other two family members (MPRs and SorLA), sortilin resides both on the membrane of intracellular vesicles and on the plasma membrane. Altered sortilin expressions due to SORT1 genetic variations affect serum levels of low density lipoprotein cholesterol (LDL-C) and contribute to the LDL-C level quantitative trait locus 6 (LDLCQ6) and susceptibility to myocardial infarction.

GENE INFORMATION

Entrez Gene ID [6272](#)

UniProt ID [Q99523](#)
