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# KD-Validated Anti-Sortilin 1 Rabbit Monoclonal Antibody

**Rabbit monoclonal antibody**
**Catalog # AGI1405**

## Specification

### KD-Validated Anti-Sortilin 1 Rabbit Monoclonal Antibody - Product Information

| | |
|---|---|
| Application | **WB** |
| Primary Accession | Q99523 |
| Reactivity | **Human** |
| Clonality | **Monoclonal** |
| Isotype | **Rabbit IgG** |
| Calculated MW | **Predicted, 92 kDa , observed, 92 kDa KDa** |
| Gene Name | **SORT1** |
| Aliases | **SORT1; Sortilin 1; NT3; Gp95; Neurotensin Receptor 3; 100 KDa NT Receptor; Glycoprotein 95; Sortilin; NTR3; LDLCQ6; GP95** |
| Immunogen | **A synthesized peptide derived from human Sortilin** |

### KD-Validated Anti-Sortilin 1 Rabbit Monoclonal Antibody - Additional Information

Gene ID **6272**

**Other Names**
Sortilin, 100 kDa NT receptor, Glycoprotein 95, Gp95, Neurotensin receptor 3, NT3, NTR3, SORT1 (<a href="http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=11186" target="_blank">HGNC:11186</a>)

### KD-Validated Anti-Sortilin 1 Rabbit Monoclonal Antibody - Protein Information

**Name** SORT1 (HGNC:11186)

**Function**
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). Lysosomal proteins bind specifically to the receptor in the Golgi apparatus and the resulting receptor-ligand complex is transported to an acidic prelysosomal compartment where the low pH mediates the dissociation of the complex (PubMed:<a href="http://www.uniprot.org/citations/16787399" target="_blank">16787399</a>). The receptor is then recycled back to the Golgi for another round of trafficking through its binding to the retromer. 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 matrix during osteogenic differentiation by scavenging extracellular 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.

**Cellular Location**
Golgi apparatus, Golgi stack membrane; Single-pass type I membrane protein. Endosome membrane; Single-pass type I membrane protein. Endoplasmic reticulum membrane; Single- pass type I membrane protein. Nucleus membrane; Single-pass type I membrane protein. Cell membrane; Single-pass type I membrane protein; Extracellular side Lysosome membrane; Single-pass type I membrane protein. Note=Localized to membranes of the endoplasmic reticulum, endosomes, Golgi stack, lysosomes and nucleus. A small fraction of the protein is also localized to the plasma membrane. May also be found in SLC2A4/GLUT4 storage vesicles (GSVs) in adipocytes Localization to the plasma membrane in adipocytes may be enhanced by insulin

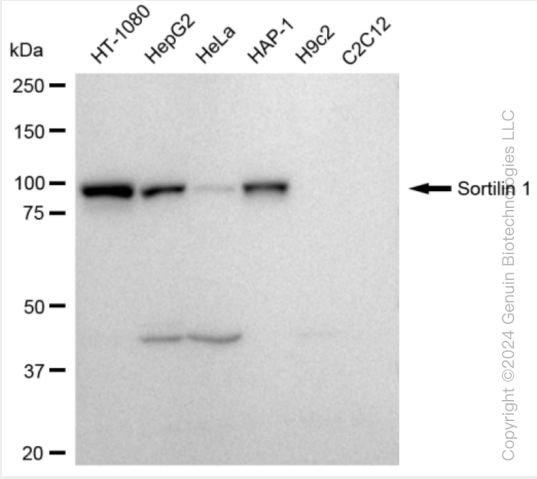
**Tissue Location**
Expressed in brain and prostate (at protein level). Expressed at high levels in brain, spinal cord, heart, skeletal muscle, thyroid, placenta and testis. Expressed at lower levels in lymphoid organs, kidney, colon and liver.

## KD-Validated Anti-Sortilin 1 Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## KD-Validated Anti-Sortilin 1 Rabbit Monoclonal Antibody - Images




Western blotting analysis using anti-Sortilin 1 antibody (Cat#AGI1405). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Sortilin 1 antibody (Cat#AGI1405, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

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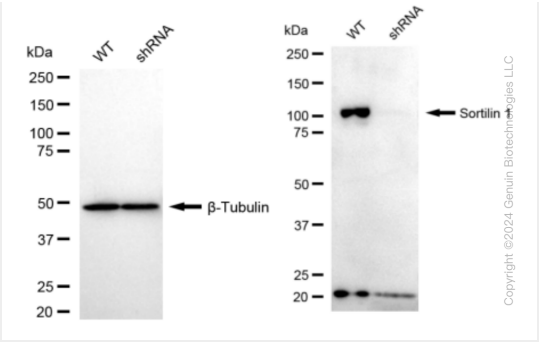


Western blotting analysis using anti-Sortilin 1 antibody (Cat#AGI1405). Sortilin 1 expression in wild type (WT) and Sortilin 1 shRNA knockdown (KD) HT-1080 cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with anti-Sortilin 1 antibody (Cat#AGI1405, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.