

Goat Anti-SNX9 Antibody

Peptide-affinity purified goat antibody Catalog # AF2018a

Specification

Goat Anti-SNX9 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB <u>O9Y5X1</u> <u>NP_057308</u>, <u>51429</u> Human Mouse, Dog Goat Polyclonal 0.5 mg/ml IgG 66592

Goat Anti-SNX9 Antibody - Additional Information

Gene ID 51429

Other Names Sorting nexin-9, SH3 and PX domain-containing protein 1, Protein SDP1, SH3 and PX domain-containing protein 3A, SNX9, SH3PX1, SH3PXD3A

Format

0.5 mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-SNX9 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-SNX9 Antibody - Protein Information

Name SNX9

Synonyms SH3PX1, SH3PXD3A

Function

Involved in endocytosis and intracellular vesicle trafficking, both during interphase and at the end of mitosis. Required for efficient progress through mitosis and cytokinesis. Required for normal formation of the cleavage furrow at the end of mitosis. Plays a role in endocytosis via



clathrin-coated pits, but also clathrin- independent, actin-dependent fluid-phase endocytosis. Plays a role in macropinocytosis. Promotes internalization of TNFR. Promotes degradation of EGFR after EGF signaling. Stimulates the GTPase activity of DNM1. Promotes DNM1 oligomerization. Promotes activation of the Arp2/3 complex by WASL, and thereby plays a role in the reorganization of the F-actin cytoskeleton. Binds to membranes enriched in phosphatidylinositol 4,5-bisphosphate and promotes membrane tubulation. Has lower affinity for membranes enriched in phosphatidylinositol 3- phosphate.

Cellular Location

Cytoplasmic vesicle membrane; Peripheral membrane protein; Cytoplasmic side. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cytoplasmic vesicle, clathrin-coated vesicle. Golgi apparatus, trans-Golgi network. Cell projection, ruffle. Cytoplasm Note=Localized at sites of endocytosis at the cell membrane. Detected on newly formed macropinosomes. Transiently recruited to clathrin- coated pits at a late stage of clathrin-coated vesicle formation Colocalizes with the actin cytoskeleton at the cell membrane

Tissue Location

Widely expressed, with highest levels in heart and placenta, and lowest levels in thymus and peripheral blood leukocytes

Goat Anti-SNX9 Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Goat Anti-SNX9 Antibody - Images



AF2018a (0.1 μ g/ml) staining of human placenta lysate (35 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



Goat Anti-SNX9 Antibody - Background

This gene encodes a member of the sorting nexin family. Members of this family contain a phox (PX) domain, which is a phosphoinositide binding domain, and are involved in intracellular trafficking. This protein does not contain a coiled coil region, like some family members, but does contain a SH3 domain near its N-terminus. This protein interacts with the cytoplasmic domains of the precursor but not the processed forms of a disintegrin and metalloprotease domain 9 and 15. This protein binds the beta-appendage domain of adaptor protein 2 and may function to assist adaptor protein 2 in its role at the plasma membrane. This protein interacts with activated Cdc42-associated kinase-2 to regulate the degradation of epidermal growth factor receptor protein.

Goat Anti-SNX9 Antibody - References

The E3 ubiquitin ligase Itch regulates sorting nexin 9 through an unconventional substrate recognition domain. Baumann C, et al. FEBS J, 2010 Jul. PMID 20491914.

Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614.

Mechanism of aldolase control of sorting nexin 9 function in endocytosis. Rangarajan ES, et al. J Biol Chem, 2010 Apr 16. PMID 20129922.

Identification of SH3 domain interaction partners of human FasL (CD178) by phage display screening. Voss M, et al. BMC Immunol, 2009 Oct 6. PMID 19807924.

Structure and plasticity of Endophilin and Sorting Nexin 9. Wang Q, et al. Structure, 2008 Oct 8. PMID 18940612.