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Goat Anti-SNX5 Antibody

Peptide-affinity purified goat antibody
Catalog # AF2017a

Specification

Goat Anti-SNX5 Antibody - Product Information

Application	**WB, IHC, E**
Primary Accession	Q9Y5X3
Other Accession	NP_689413, 27131, 69178 (mouse)
Reactivity	**Human**
Predicted	**Mouse, Rat, Pig, Dog**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**46816**

Goat Anti-SNX5 Antibody - Additional Information

Gene ID 27131

Other Names
Sorting nexin-5, SNX5

Dilution
WB~~1:1000
IHC~~1:100~500
E~~N/A

Format
0.5 mg IgG/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-SNX5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-SNX5 Antibody - Protein Information

Name SNX5

Function
Involved in several stages of intracellular trafficking. Interacts with membranes containing

phosphatidylinositol 3-phosphate (PtdIns(3P)) or phosphatidylinositol 3,4-bisphosphate (PtdIns(3,4)P2) (PubMed:15561769). Acts in part as component of the retromer membrane-deforming SNX-BAR subcomplex. The SNX-BAR retromer mediates retrograde transport of cargo proteins from endosomes to the trans-Golgi network (TGN) and is involved in endosome-to-plasma membrane transport for cargo protein recycling. The SNX-BAR subcomplex functions to deform the donor membrane into a tubular profile called endosome-to-TGN transport carrier (ETC) (Probable). Does not have in vitro vesicle-to-membrane remodeling activity (PubMed:23085988). Involved in retrograde transport of lysosomal enzyme receptor IGF2R (PubMed:17148574, PubMed:18596235). May function as link between endosomal transport vesicles and dynactin (Probable). Plays a role in the internalization of EGFR after EGF stimulation (Probable). Involved in EGFR endosomal sorting and degradation; the function involves PIP5K1C isoform 3 and is retromer- independent (PubMed:23602387). Together with PIP5K1C isoform 3 facilitates HGS interaction with ubiquitinated EGFR, which initiates EGFR sorting to intraluminal vesicles (ILVs) of the multivesicular body for subsequent lysosomal degradation (Probable). Involved in E-cadherin sorting and degradation; inhibits PIP5K1C isoform 3-mediated E-cadherin degradation (PubMed:24610942). Plays a role in macropinocytosis (PubMed:18854019, PubMed:21048941).

Cellular Location
Endosome. Early endosome Early endosome membrane; Peripheral membrane protein; Cytoplasmic side. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cytoplasmic vesicle membrane; Peripheral membrane protein; Cytoplasmic side. Cytoplasm. Cell projection, phagocytic cup. Cell projection, ruffle. Note=Recruited to the plasma membrane after EGF stimulation, which leads to increased levels of phosphatidylinositol 3,4-bisphosphate (PdtIns(3,4)P2) (PubMed:15561769). Detected on macropinosomes (PubMed:16968745, PubMed:21048941). Targeted to membrane ruffles in response to EGFR stimulation.

Goat Anti-SNX5 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

Goat Anti-SNX5 Antibody - Images

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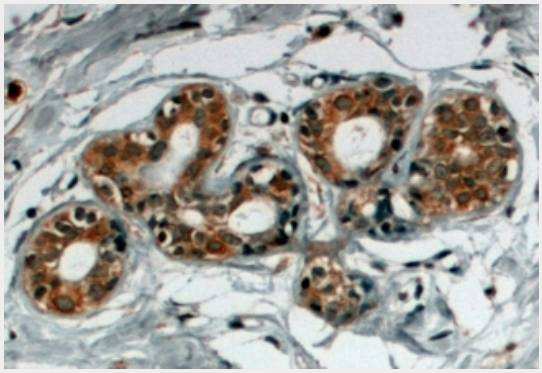
AF2017a staining (1 µg/ml) of Jurkat lysate (RIPA buffer, 35 µg total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.



AF2017a (4 µg/ml) staining of paraffin embedded Human Breast. Steamed antigen retrieval with citrate buffer pH 6, HRP-staining.

Goat Anti-SNX5 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 binds to fanconi anemia complementation group A protein, but its function is unknown. This gene results in two transcript variants encoding the same protein.

Goat Anti-SNX5 Antibody - References

Transcriptomic and genetic studies identify IL-33 as a candidate gene for Alzheimer's disease. Chapuis J, et al. Mol Psychiatry, 2009 Nov. PMID 19204726.
The DHR1 domain of DOCK180 binds to SNX5 and regulates cation-independent mannose 6-phosphate receptor transport. Hara S, et al. Mol Biol Cell, 2008 Sep. PMID 18596235.
A loss-of-function screen reveals SNX5 and SNX6 as potential components of the mammalian retromer. Wassmer T, et al. J Cell Sci, 2007 Jan 1. PMID 17148574.
Snx5, as a Mind bomb-binding protein, is expressed in hematopoietic and endothelial precursor cells in zebrafish. Yoo KW, et al. FEBS Lett, 2006 Aug 7. PMID 16857196.
A human protein-protein interaction network: a resource for annotating the proteome. Stelzl U, et al. Cell, 2005 Sep 23. PMID 16169070.