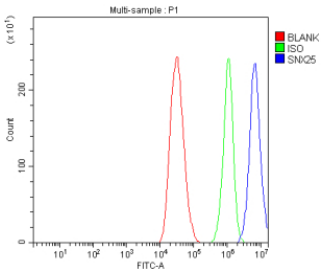
SNX25 Antibody / Sorting nexin 25 (FY12564)

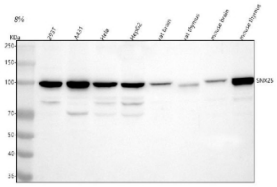
Catalog No.	Formulation	Size
FY12564	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

Availability	1-2 days
Species Reactivity	Human, Mouse, Rat
Format	Lyophilized
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Immunogen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	Q9H3E2
Applications	Western Blot: 0.25-0.5ug/ml Flow cytometry: 1-3ug/million cells ELISA: 0.1-0.5ug/ml
Limitations	This SNX25 antibody is available for research use only.



Flow Cytometry analysis of HepG2 cells using anti-SNX25 antibody. Overlay histogram showing HepG2 cells stained with (Blue line). The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with rabbit anti-SNX25 antibody (1 ug/million cells) for 30 min at 20oC. DyLight 488 conjugated goat anti-rabbit IgG (5-10 ug/million cells) was used as secondary antibody for 30 minutes at 20oC. Isotype control antibody (Green line) was rabbit IgG (1 ug/million cells) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



Western blot analysis of SNX25 using anti-SNX25 antibody. Lane 1: human 293T whole cell lysates, Lane 2: human whole cell lysates, Lane 3: human Hela whole cell lysates, Lane 4: human HepG2 whole cell lysates, Lane 5: rat brain tissue lysates, Lane 6: rat thymus tissue lysates, Lane 7: mouse brain tissue lysates, Lane 8: mouse thymus tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-SNX25 antibody at 0.5 ug/ml overnight at 4oC, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal was developed using enhanced chemiluminescent. The expected molecular weight of SNX25 is ~98 kDa.

Description

SNX25 antibody detects Sorting nexin-25, a member of the sorting nexin family involved in endosomal trafficking, receptor recycling, and membrane remodeling. SNX25 plays critical roles in signal transduction and protein turnover by directing cargo sorting within endosomes. The SNX25 antibody is widely used in cell biology, immunology, and receptor signaling studies to explore intracellular trafficking and degradation pathways.

SNX25 is encoded by the SNX25 gene located on human chromosome 4q24. The protein is approximately 580 amino acids long and contains a conserved phox homology (PX) domain that binds phosphatidylinositol-3-phosphate and a Bin/Amphiphysin/Rvs (BAR) domain that senses and induces membrane curvature. These structural domains enable SNX25 to participate in tubular endosome formation and cargo retrieval to the Golgi or plasma membrane.

The SNX25 antibody detects a 67 kilodalton band by western blot and shows cytoplasmic and vesicular staining by immunofluorescence. SNX25 interacts with transforming growth factor beta receptor complexes and promotes their endocytic degradation, acting as a negative regulator of transforming growth factor beta signaling. By controlling receptor turnover, SNX25 influences cellular proliferation, differentiation, and immune tolerance.

SNX25 also regulates Toll-like receptor trafficking in macrophages, affecting cytokine production and innate immune responses. In neurons, SNX25 participates in the endosomal sorting of synaptic receptors and contributes to synaptic plasticity. Its expression is dynamically regulated by inflammatory cues and cellular stress, linking endosomal remodeling to signaling adaptation.

Aberrant expression of SNX25 has been associated with cancer progression and immune dysregulation. Downregulation enhances transforming growth factor beta activity, promoting fibrosis and epithelial-mesenchymal transition, while overexpression suppresses pro-inflammatory signaling. NSJ Bioreagents provides a validated SNX25 antibody optimized for western blot and flow cytometry, supporting detailed studies of receptor sorting, endosomal dynamics, and signaling modulation.

Application Notes

Optimal dilution of the SNX25 antibody should be determined by the researcher.

Immunogen

E.coli-derived human SNX25 recombinant protein (Position: H48-K584) was used as the immunogen for the SNX25 antibody.

Storage

After reconstitution, the SNX25 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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