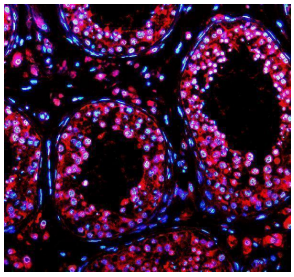
FZD9 Antibody / Frizzled-9 Antibody (FY13537)

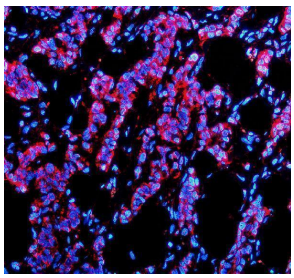
Catalog No.	Formulation	Size
FY13537	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

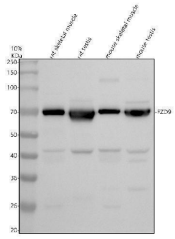
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	O00144
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml Immunofluorescence: 5ug/ml Flow cytometry: 1-3ug/million cells ELISA: 0.1-0.5 ug/ml
Limitations	The FZD9 Antibody / Frizzled-9 Antibody is available for research use only.



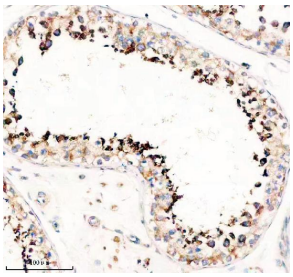
FZD9 Antibody by IF in human testis. Immunofluorescence analysis of paraffin-embedded human testis using Frizzled-9 Antibody reveals red fluorescence in cells lining seminiferous tubules, with blue DAPI-stained nuclei. The staining is evident across multiple tubule profiles and is associated with the seminiferous epithelium. Heat-mediated antigen retrieval used EDTA buffer at pH 8.0, followed by blocking with 10% goat serum. Sections were incubated with primary antibody at 5 ug/mL overnight at 4oC and detected with a Cy3-conjugated secondary antibody at 1:500. This figure illustrates FZD9-associated immunoreactivity in human testicular tissue.



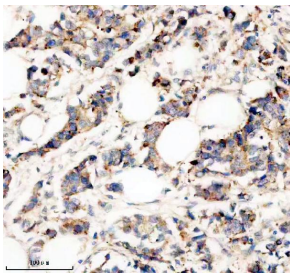
FZD9 Antibody by IF in human breast carcinoma. Immunofluorescence staining of paraffin-embedded human breast carcinoma with Frizzled-9 Antibody reveals red fluorescence within epithelial tumor structures and blue DAPI nuclear counterstaining. The signal outlines numerous cells within the gland-forming tumor compartment. Tissue underwent heat-mediated epitope retrieval in EDTA buffer at pH 8.0 and blocking with 10% goat serum. Primary antibody was applied at 5 ug/mL overnight at 4oC, followed by a Cy3-conjugated secondary antibody at 1:500. The image demonstrates FZD9-associated staining in the carcinoma section.



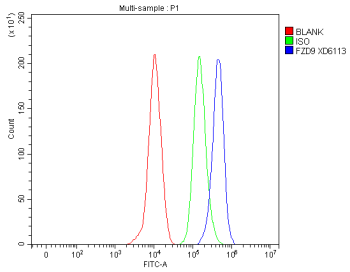
FZD9 Antibody by WB in rat and mouse tissues. Western blot analysis with Frizzled-9 Antibody detects a principal band near 70 kDa in rat small intestine (lane 1), rat testis (lane 2), mouse small intestine (lane 3), and mouse testis (lane 4). The observed migration is moderately above the calculated approximately 64.5 kDa molecular weight of FZD9. Reduced tissue lysates containing 30 ug protein per lane were resolved by 10% SDS-PAGE and transferred to nitrocellulose. Primary antibody was incubated at 0.5 ug/mL overnight at 4oC, followed by HRP-based chemiluminescent detection. The principal immunoreactive band is present in both species.



FZD9 Antibody by IHC in human testis. Immunohistochemistry of paraffin-embedded human testis using Frizzled-9 Antibody demonstrates brown immunoreactivity among cells of the seminiferous tubules, with blue hematoxylin-stained nuclei. Positive staining is distributed along portions of the seminiferous epithelium. Sections underwent EDTA antigen retrieval at pH 8.0, blocking with 10% goat serum, and incubation with primary antibody at 2 ug/mL overnight at 4oC. Bound antibody was visualized using a peroxidase-linked secondary reagent and DAB chromogen. The image provides histological evidence of FZD9-associated staining in testicular tissue.



FZD9 Antibody by IHC in human breast carcinoma. Immunohistochemistry of paraffin-embedded human breast carcinoma using Frizzled-9 Antibody shows brown immunoreactivity in a subset of epithelial tumor cells, with hematoxylin counterstaining highlighting nuclei. The staining varies across the glandular structures visible in the section. Heat-mediated antigen retrieval was performed in EDTA buffer at pH 8.0, followed by 10% goat serum blocking. Primary antibody was applied at 2 ug/mL overnight at 4oC and detected with a peroxidase-conjugated secondary antibody and DAB. This figure documents FZD9-associated immunoreactivity in human breast carcinoma.



FZD9 Antibody by FACS in THP-1 cells. Flow cytometric analysis using Frizzled-9 Antibody shows a rightward fluorescence shift in stained THP-1 cells (blue histogram) compared with the rabbit IgG isotype control (green) and unstained control (red). Cells were fixed in 4% paraformaldehyde, blocked with 10% goat serum, and incubated with primary antibody at 1 ug per 1 x 10^6 cells for 30 minutes at 20oC. DyLight 488-conjugated secondary antibody was used for detection. The histogram demonstrates antibody-associated fluorescence under the stated conditions.

Description

FZD9 Antibody / Frizzled-9 Antibody detects FZD9, a seven-transmembrane receptor belonging to the Frizzled family involved in Wnt signaling. Wnt proteins are extracellular signaling molecules that regulate cell fate, proliferation, differentiation, and tissue organization. Frizzled receptors interact with Wnt ligands and participate in receptor complexes that determine how signals are transmitted into the cell. FZD9 contains an extracellular cysteine-rich domain important for ligand recognition and a membrane-spanning region that supports communication with intracellular signaling components.

Wnt signaling includes beta-catenin-dependent pathways and several beta-catenin-independent responses. The outcome of FZD9 engagement depends on the available ligands, co-receptors, and intracellular effectors, rather than on the receptor alone. FZD9 has been investigated in developmental biology, including aspects of bone formation and neural function. Its gene lies within the chromosome 7q11.23 region associated with Williams syndrome, making its dosage and regulation of particular interest in developmental genetics. Nevertheless, effects of larger chromosomal deletions cannot be attributed solely to FZD9 without specific evidence. The Frizzled-9 Antibody designation identifies this molecular target by its descriptive protein name.

Receptor abundance, membrane localization, and interactions with other Wnt pathway components all influence signaling behavior. FZD9 is one of several Frizzled receptors with overlapping ligand recognition, so functional conclusions should account for possible contributions from related family members. Altered Wnt signaling has been implicated in numerous developmental and disease-associated processes, but its effects are highly context dependent. NSJ Bioreagents offers the FZD9 Antibody for this receptor target. An FZD9 Antibody is relevant to understanding frizzled receptor biology, Wnt-dependent communication, and the molecular regulation of tissue development.

Explore related research targets in our Signal Transduction Antibodies for Cell Signaling and Regulatory Pathway Research collection.

Application Notes

Optimal working dilutions for the FZD9 Antibody / Frizzled-9 Antibody should be established experimentally for each assay.

Immunogen

The FZD9 Antibody was generated using e. coli-derived human Frizzled 9/FZD9 recombinant protein (amino acids R27-L591).

Storage

The FZD9 Antibody is stable for up to one month at 4oC after reconstitution. For longer-term storage, aliquot and store at -20oC for up to six months. Do not repeatedly freeze and thaw.

Alternate Names

FZD9 antibody, Frizzled-9 antibody, frizzled class receptor 9 antibody, FZD3 antibody, Fz-9 antibody, hFz9 antibody, FzE6 antibody, CD antigen CD349 antibody

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