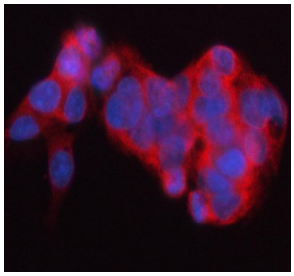
FZD4 Antibody / Wnt Signaling Receptor Antibody (RQ4100)

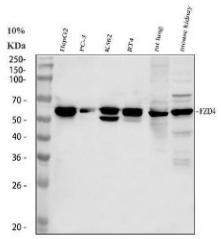
Catalog No.	Formulation	Size
RQ4100	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q9ULV1
Localization	Cytoplasmic, membrane
Applications	Western Blot: 0.5-1ug/ml Immunofluorescence: 5ug/ml
Limitations	This FZD4 Antibody / Wnt Signaling Receptor Antibody is available for research use only.



FZD4 Antibody HepG2 Cell IF. Immunofluorescence analysis of FZD4 Antibody / Wnt Signaling Receptor Antibody in HepG2 cells following enzyme antigen retrieval. Cells were incubated with FZD4 antibody at 5 ug/ml and detected with a Cy3-conjugated secondary antibody (red), while nuclei were counterstained with DAPI (blue). The staining demonstrates cytoplasmic and membrane-associated FZD4 expression, consistent with its role as a Wnt signaling receptor, supporting studies of receptor localization and Wnt pathway biology.



FZD4 Antibody Human, Rat and Mouse WB. Western blot analysis of FZD4 Antibody / Wnt Signaling Receptor Antibody detected a specific band at approximately 60 kDa, matching the expected molecular weight of FZD4. Lane 1: human HepG2; Lane 2: human PC-3; Lane 3: human K562; Lane 4: human RT4; Lane 5: rat lung; Lane 6: mouse kidney lysate. The membrane was incubated with FZD4 antibody at 0.5 ug/ml followed by an HRP-conjugated secondary antibody. This FZD4 Antibody, a Wnt signaling receptor antibody, is suitable for detecting endogenous FZD4 across human, rat and mouse samples.

Description

FZD4 Antibody / Wnt Signaling Receptor Antibody recognizes Frizzled Class Receptor 4 (FZD4), a seven-pass transmembrane receptor that belongs to the Frizzled family of Wnt receptors. FZD4 is a key component of canonical Wnt signaling and is particularly important for vascular development within the retina and central nervous system. Upon binding specific Wnt ligands or the ligand Norrin in conjunction with co-receptors such as LRP5 and TSPAN12, FZD4 activates intracellular signaling pathways that regulate cell proliferation, differentiation, migration and tissue organization. These activities make FZD4 an important target for developmental biology, vascular research and studies of tissue homeostasis. NSJ Bioreagents offers FZD4 antibodies for investigators examining Wnt receptor expression and signaling mechanisms.

FZD4 is expressed in multiple tissues but has especially well-characterized functions in endothelial cells of the retinal vasculature, where it directs blood vessel formation, maturation and maintenance. Genetic variants affecting FZD4 signaling have been linked to inherited retinal vascular disorders, emphasizing the receptor's essential role in ocular development. Beyond the eye, FZD4 contributes to vascular stability, blood-brain barrier function and organ development through tightly regulated Wnt signaling. Altered FZD4 expression or activity has also been investigated in cancer biology, where dysregulated Wnt pathways can influence tumor growth, angiogenesis and metastatic behavior.

Because Wnt signaling regulates stem cell maintenance, embryonic patterning and tissue regeneration, FZD4 has become a valuable research target across numerous biological disciplines. Studies frequently examine receptor localization, downstream beta-catenin activation, ligand responsiveness and interactions with signaling partners. Measuring FZD4 expression can help characterize developmental pathways, evaluate disease-associated signaling changes and investigate therapeutic strategies aimed at modulating Wnt pathway activity. Research involving FZD4 also contributes to understanding endothelial cell biology, vascular remodeling and regenerative medicine.

An FZD4 Antibody is an important tool for detecting this Wnt signaling receptor in applications including Western blotting, immunohistochemistry, immunofluorescence, flow cytometry and related immunoassays. By enabling reliable analysis of receptor expression and distribution, an FZD4 Antibody supports investigations into Wnt signaling, retinal vascular development, angiogenesis and receptor-mediated cell communication.

Researchers studying receptor-mediated Wnt signaling may also be interested in our Signaling Antibodies page, which features antibodies against Frizzled receptors, Wnt ligands, beta-catenin pathway components and other proteins involved in canonical and non-canonical Wnt signaling.

Application Notes

Optimal dilution of the FZD4 Antibody / Wnt Signaling Receptor Antibody should be determined by the researcher.

Immunogen

Amino acids QNLGYNVTKMPNLVGHELQTDAELQLTTFTPLIQY from the human protein were used as the immunogen for the FZD4 antibody.

Storage

After reconstitution, the FZD4 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

FZD4 antibody, Frizzled 4 antibody, Frizzled Class Receptor 4 antibody, Fz-4 antibody, CD344 antibody

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