

Rabbit Anti-Frizzled 2/Biotin Conjugated antibody

SL6623R-Bio

Product Name	Anti-Frizzled 2/Biotin
Chinese Name	生物素标记的 Wnt 信号受体 FZD2 蛋白抗体
Alias	Frizzled homolog 2; Frizzled-2; Frizzled2; Fz 2; Fz-2; Fz2; FZD 2; FZD2; FZD2_HUMAN; FzE 2; FzE2; hFz 2; hFz2.
Research Area	Tumour Cell biology Signal transduction Stem cells transcriptional regulatory factor G protein-coupled receptor Cell Surface Molecule G protein signal
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Mouse,Rat(predicted:Human,Dog,Pig,Cow,Rabbit,Sheep,Goat) WB=1:500-2000
Applications	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight	60kDa
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human Frizzled 2
Lsotype	IgG
Purification	affinity purified by Protein A
Storage Buffer	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Storage	
Product Detail	background: The frizzled gene, originally identified in <i>Drosophila melanogaster</i> , is involved in the development of tissue polarity. The mammalian homolog of frizzled as well as several secreted mammalian frizzled-related proteins (FRPs) have been described. The frizzled proteins contain seven

transmembrane domains, a cysteine-rich domain in the extracellular region and a carboxy terminal Ser/Thr-xxx-Val motif. They function as receptors for Wnt and are generally coupled to G proteins. Expression of frizzled-2 can be observed in the fetal kidney and lung and in the adult ovary and colon. The Wnt/cGMP/Ca²⁺ pathway is mediated by frizzled-2 . It binds Wnt proteins and signals by activating the release of stored calcium. Expression of frizzled-2 is regulated by Angiotensin II. Activated frizzled-2 suppresses the activity of protein kinase G, and activates NFAT-dependent transcription, the phosphatidylinositol pathway and calcium sensitive enzymes.

Function:

Receptor for Wnt proteins. Most of frizzled receptors are coupled to the beta-catenin canonical signaling pathway, which leads to the activation of disheveled proteins, inhibition of GSK-3 kinase, nuclear accumulation of beta-catenin and activation of Wnt target genes. A second signaling pathway involving PKC and calcium fluxes has been seen for some family members, but it is not yet clear if it represents a distinct pathway or if it can be integrated in the canonical pathway, as PKC seems to be required for Wnt-mediated inactivation of GSK-3 kinase. Both pathways seem to involve interactions with G-proteins. May be involved in transduction and intercellular transmission of polarity information during tissue morphogenesis and/or in differentiated tissues.

Subcellular Location:

Membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein.

Tissue Specificity:

Widely expressed. In the adult, mainly found in heart, placenta, skeletal muscle, lung, kidney, pancreas, prostate, testis, ovary and colon. In the fetus, expressed in brain, lung and kidney. Low levels in fetal liver.

Post-translational modifications:

Ubiquitinated by ZNRF3, leading to its degradation by the proteasome (By similarity).

Similarity:

Belongs to the G-protein coupled receptor Fz/Smo family.
Contains 1 FZ (frizzled) domain.

Database links:

[Entrez Gene: 2535](#) Human



[Entrez Gene: 57265](#) Mouse

[Entrez Gene: 64512](#) Rat

[Omim: 600667](#) Human

[SwissProt: Q14332](#) Human

[SwissProt: Q9JIP6](#) Mouse

[SwissProt: Q08464](#) Rat

[Unigene: 142912](#) Human

[Unigene: 597264](#) Human

[Unigene: 36416](#) Mouse

[Unigene: 92324](#) Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.