# Anti-Frizzled-4 antibody

| | |
|---|---|
| **Description** | Rabbit polyclonal to Frizzled-4. |

| | |
|---|---|
| **Model** | STJ93144 |
| **Host** | Rabbit |
| **Reactivity** | Human, Mouse, Rat |
| **Applications** | ELISA, IF |
| **Immunogen** | Synthesized peptide derived from human Frizzled-4 |
| **Immunogen Region** | 100-180 aa, Internal |
| **Gene ID** | 8322 |
| **Gene Symbol** | FZD4 |
| **Dilution range** | IF 1:200-1:1000ELISA 1:5000 |
| **Specificity** | Frizzled-4 Polyclonal Antibody detects endogenous levels of Frizzled-4 protein. |
| **Tissue Specificity** | Almost ubiquitous. Largely expressed in adult heart, skeletal muscle, ovary, and fetal kidney. Moderate amounts in adult liver, kidney, pancreas, spleen, and fetal lung, and small amounts in placenta, adult lung, prostate, testis, colon, fetal brain and liver. |
| **Purification** | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen. |
| **Note** | For Research Use Only (RUO). |
| **Protein Name** | Frizzled-4 Fz-4 hFz4 FzE4 CD antigen CD344 |

| | |
|---|---|
| **Molecular Weight** | 59.881 kDa |
| **Clonality** | Polyclonal |
| **Conjugation** | Unconjugated |
| **Isotype** | IgG |
| **Formulation** | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide. |
| **Concentration** | 1 mg/ml |
| **Storage Instruction** | Store at -20°C, and avoid repeat freeze-thaw cycles. |
| **Database Links** | HGNC:4042OMIM:133780 |
| **Alternative Names** | Frizzled-4 Fz-4 hFz4 FzE4 CD antigen CD344 |
| **Function** | Receptor for Wnt proteins. Most of frizzled receptors are coupled to the beta-catenin (CTNNB1) canonical signaling pathway, which leads to the activation of disheveled proteins, inhibition of GSK-3 kinase, nuclear accumulation of beta-catenin (CTNNB1) and activation of Wnt target genes. Plays a critical role in retinal vascularization by acting as a receptor for Wnt proteins and norrin (NDP). In retina, it can be both activated by Wnt protein-binding, but also by a Wnt-independent signaling via binding of norrin (NDP), promoting in both cases beta-catenin (CTNNB1) accumulation and stimulation of LEF/TCF-mediated transcriptional programs. 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. |
| **Sequence and Domain Family** | Lys-Thr-X-X-X-Trp motif interacts with the PDZ domain of Dvl (Disheveled) family members and is involved in the activation of the Wnt/beta-catenin signaling pathway. The FZ domain is involved in binding with Wnt ligands. |
| **Cellular Localization** | Membrane. Multi-pass membrane protein. Cell membrane |
| **Post-translational Modifications** | Ubiquitinated by ZNRF3, leading to its degradation by the proteasome. |