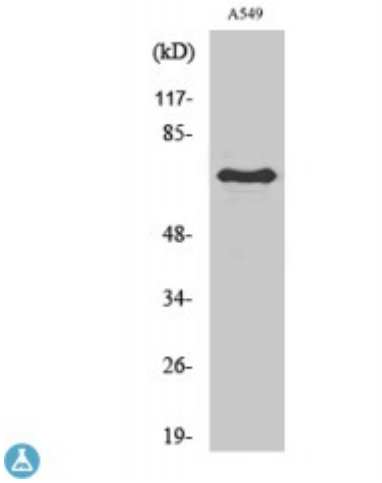
Anti-Frizzled-3 antibody



Description	Rabbit polyclonal to Frizzled-3.

Model	STJ93142
Host	Rabbit
Reactivity	Human, Mouse
Applications	ELISA, IF, WB
Immunogen	Synthesized peptide derived from human Frizzled-3
Immunogen Region	110-190 aa, Internal
Gene ID	7976
Gene Symbol	FZD3
Dilution range	WB 1:500-1:2000IF 1:200-1:1000ELISA 1:10000
Specificity	Frizzled-3 Polyclonal Antibody detects endogenous levels of Frizzled-3 protein.
Tissue Specificity	Widely expressed. Relatively high expression in the CNS, including regions of the limbic system, in kidney, pancreas, skeletal muscle, uterus and testis.
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-3 Fz-3 hFz3
Molecular Weight	76 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:4041OMIM:606143
Alternative Names	Frizzled-3 Fz-3 hFz3
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. Activation by Wnt5A stimulates PKC activity via a G-protein-dependent mechanism. Involved in transduction and intercellular transmission of polarity information during tissue morphogenesis and/or in differentiated tissues. Plays a role in controlling early axon growth and guidance processes necessary for the formation of a subset of central and peripheral major fiber tracts. Required for the development of major fiber tracts in the central nervous system, including: the anterior commissure, the corpus callosum, the thalamocortical, corticothalamic and nigrostriatal tracts, the corticospinal tract, the fasciculus retroflexus, the mammillothalamic tract, the medial lemniscus, and ascending fiber tracts from the spinal cord to the brain. In the peripheral nervous system, controls axon growth in distinct populations of cranial and spinal motor neurons, including the facial branchimotor nerve, the hypoglossal nerve, the phrenic nerve, and motor nerves innervating dorsal limbs. Involved in the migration of cranial neural crest cells. May also be implicated in the transmission of sensory information from the trunk and limbs to the brain. Controls commissural sensory axons guidance after midline crossing along the anterior-posterior axis in the developing spinal cord in a Wnt-dependent signaling pathway. Together with FZD6, is involved in the neural tube closure and plays a role in the regulation of the establishment of planar cell polarity (PCP), particularly in the orientation of asymmetric bundles of stereocilia on the apical faces of a subset of auditory and vestibular sensory cells located in the inner ear. Promotes neurogenesis by maintaining sympathetic neuroblasts within the cell cycle in a beta-catenin-dependent manner .
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 Cell surface Apical cell membrane
Post-translational Modifications	Ubiquitinated by ZNRF3, leading to its degradation by the proteasome.

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