Mouse Frizzled-2 Alexa Fluor® 405-conjugated Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF1307V
100 µg

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Frizzled-2 in direct ELISAs and Western blots. In direct ELISAs, approximately 30% cross-reactivity with recombinant mouse (rm) Frizzled-1 is observed and less than 5% cross-reactivity with rmFrizzled-4, recombinant human Friz
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Frizzled-2 Gln29-Leu168 Accession # Q9JIP6
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

Western Blot	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Wnt signaling is involved in variety of developmental processes including cell fate determination, cell polarity, tissue patterning and control of cell proliferation. Members of the Frizzled family of proteins serve as receptors for the Wnt signaling pathway. The founding member of this family was identified in Drosophila based on its role in tissue polarity in the adult cuticle and named for the disorganized appearance of bristle hairs on the mutant. Ten mammalian Frizzled genes have been identified to date. The predicted structure of Frizzled proteins is similar among all family members, containing a divergent N-terminal signal peptide, a highly conserved extracellular cysteine-rich domain, a variable-length linker region, a seven-pass transmembrane domain, and a variable-length C-terminal tail. One of the most conserved regions of the Frizzled proteins is the extracellular cysteine-rich domain (CRD) which spans approximately 120 AA and contains 10 invariant cysteines (1). Mouse Frizzled-2 shows 100% amino acid identity to human and rat Frizzled-2 in the CRD region. Frizzled-2 expression is greater in embryonic than adult tissues, with heart, brain, lung, kidney and gut showing the highest levels (2). In addition, Frizzled-2 is expressed during migration and proliferation of neural crest cells that populate the heart and great arteries (3). However, Frizzled-2 may not be strictly involved in developmental processes, as its expression is also upregulated in myofibroblasts during tissue repair after myocardial infarction (4). Frizzled-2 is implicated in the Wnt/Ca2+ pathway, a mechanism by which Wnt-5a signaling results in calcium release from intracellular stores and activation of PKC and calmodulin-dependent protein kinase (5). Secreted frizzled related proteins (sFRPs), antagonists of the Wnt pathway, have been shown to interact with both Wnt ligands and Frizzled receptors (6).

PRODUCT SPECIFIC NOTICES

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