SANTA CRUZ BIOTECHNOLOGY, INC.

# frizzled-6 (C-12): sc-393791

## BACKGROUND

frizzled-6 (FZD6, also known as frizzled homolog 6 in *Drosophila)* is a seven-transmembrane domain receptor that binds the Wnt ligand and influences macroscopic hair patterning and other tissue polarity events. Frizzled-6 protein contains a signal peptide and a cysteine-rich domain (CRD) in the N-terminal extracellular region, and does not contain a C-terminal PDZ domain-binding motif. Frizzled-3 and frizzled-6 influence neural tube closure and the planar orientation of hair bundles on a subset of auditory and vestibular sensory cells. Madin-Darby canine kidney (MDCK) cells are competent to form tubules *in vitro* and express the frizzled-6 receptor, which is known to form a complex with Wnt-4 through the CRD in this cell type. Frizzled-6 is expressed as a 4.4 kb mRNA in various human tissues, including adult heart, brain, placenta, lung, liver, skeletal muscle, kidney, pancreas, thymus, prostate, testis, ovary, small intestine and colon.

## REFERENCES


1. Tokuhara, M., et al. 1998. Molecular cloning of human frizzled-6. Biochem. Biophys. Res. Commun. 243: 622-627.
2. Yanagawa, S., et al. 1998. Identification and characterization of a novel line of *Drosophila* Schneider S2 cells that respond to wingless signaling. J. Biol. Chem. 273: 32353-32359.
3. Golan, T., et al. 2004. The human frizzled 6 (HFz6) acts as a negative regulator of the canonical Wnt. β-catenin signaling cascade. J. Biol. Chem. 279: 14879-14888.


## CHROMOSOMAL LOCATION

Genetic locus: FZD6 (human) mapping to 8q22.3; Fzd6 (mouse) mapping to 15 B3.1.

## SOURCE

frizzled-6 (C-12) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 57-79 within an N-terminal extracellular domain of frizzled-6 of human origin.

## PRODUCT

Each vial contains 200 µg $IgG_{2b}$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

frizzled-6 (C-12) is available conjugated to agarose (sc-393791 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-393791 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393791 PE), fluorescein (sc-393791 FITC), Alexa Fluor® 488 (sc-393791 AF488), Alexa Fluor® 546 (sc-393791 AF546), Alexa Fluor® 594 (sc-393791 AF594) or Alexa Fluor® 647 (sc-393791 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393791 AF680) or Alexa Fluor® 790 (sc-393791 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-393791 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).



## APPLICATIONS

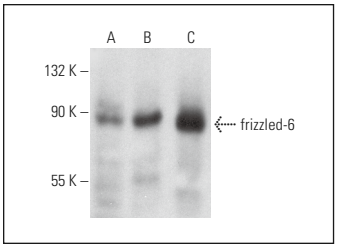
frizzled-6 (C-12) is recommended for detection of frizzled-6 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for frizzled-6 siRNA (h): sc-39987, frizzled-6 siRNA (m): sc-39989, frizzled-6 shRNA Plasmid (h): sc-39987-SH, frizzled-6 shRNA Plasmid (m): sc-39989-SH, frizzled-6 shRNA (h) Lentiviral Particles: sc-39987-V and frizzled-6 shRNA (m) Lentiviral Particles: sc-39989-V.

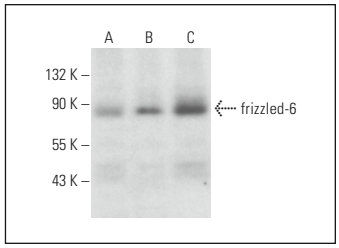
Molecular Weight of frizzled-6: 79 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, CCRF-CEM cell lysate: sc-2225 or HT-29 whole cell lysate: sc-364232.

## DATA




frizzled-6 (C-12): sc-393791. Western blot analysis of frizzled-6 expression in Jurkat (**A**), CCRF-CEM (**B**) and HT-29 (**C**) whole cell lysates.




frizzled-6 (C-12): sc-393791. Western blot analysis of frizzled-6 expression in MCF7 (**A**), HUV-EC-C (**B**) and HeLa (**C**) whole cell lysates.

## SELECT PRODUCT CITATIONS


1. Wang, S., et al. 2020. Prenatal low-dose methyltestosterone, but not dihydrotestosterone treatment induces penile formation in female mice and guinea pigs. Biol. Reprod. 102: 1248-1260.
2. Rogan, M.R., et al. 2021. *Ehrlichia chaffeensis* TRP120 is a Wnt ligand mimetic that interacts with Wnt receptors and contains a novel repetitive short linear motif that activates Wnt signaling. mSphere 6: e00216-21.
3. Niu, J., et al. 2021. Oligodendroglial ring finger protein Rnf43 is an essential injury-specific regulator of oligodendrocyte maturation. Neuron 109: 3104-3118.e6.


## STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.