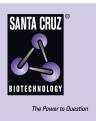
SANTA CRUZ BIOTECHNOLOGY, INC.

Jagged1 (T-19): sc-34474



BACKGROUND

The LIN-12/Notch family of transmembrane receptors is believed to play a central role in development by regulating cell fate decisions. Ligands for Notch include Jagged1, Jagged2 and Delta. Jagged is a membrane protein and can activate Notch and prevent myoblast differentiation by inhibiting the expression of muscle regulatory and structural genes. It is involved in mammalian cardiovascular development and in cell-fate decisions during hematopoiesis. Jagged is expressed in adult and fetal tissues. Expression of Jagged is upregulated in cervical squamous cell carcinoma. Familial Tetralogy of Fallot, the most common form of complex congenital heart disease, is caused by a mutation in the Jagged1 gene.

REFERENCES

- Laborda, J., et al. 1993. dlk, a putative mammalian homeotic gene differentially expressed in small cell lung carcinomas and neuroendocrine tumor cell line. J. Biol. Chem. 268: 3817-3820.
- 2. Simpson, P. 1994. The Notch Receptors. Austin, TX: R.G. Landes Company.
- 3. Lindsell, C.E., et al. 1995. Jagged: a mammalian ligand that activates Notch1. Cell 80: 909-917.
- Valsecchi, C., et al. 1997. Jagged2: a putative Notch ligand expressed in the apical ectodermal ridge and in sites of epithelial-mesenchymal interactions. Mech. Dev. 69: 203-207.
- Crosnier, C., et al. 2001. Fifteen novel mutations in the Jagged1 gene of patients with Alagille syndrome. Hum. Mutat. 17: 72-73.
- 6. Eldadah, Z.A., et al. 2001. Familial Tetralogy of Fallot caused by mutation in the Jagged1 gene. Hum. Mol. Genet. 10: 163-169.

CHROMOSOMAL LOCATION

Genetic locus: JAG1 (human) mapping to 20p12.2; Jag1 (mouse) mapping to 2 F3.

SOURCE

Jagged1 (T-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Jagged1 of human origin.

PRODUCT

Each vial contains 200 μg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-34474 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

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

APPLICATIONS

Jagged1 (T-19) is recommended for detection of Jagged1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for Jagged1 siRNA (h): sc-37202, Jagged1 siRNA (m): sc-37203, Jagged1 siRNA (r): sc-61881, Jagged1 shRNA Plasmid (h): sc-37202-SH, Jagged1 shRNA Plasmid (m): sc-37203-SH, Jagged1 shRNA Plasmid (r): sc-61881-SH, Jagged1 shRNA (h) Lentiviral Particles: sc-37202-V, Jagged1 shRNA (m) Lentiviral Particles: sc-37203-V and Jagged1 shRNA (r) Lentiviral Particles: sc-61881-V.

Molecular Weight of Jagged1: 150 kDa.

Positive Controls: mouse embryo extract: sc-364239 or RAW 264.7 whole cell lysate: sc-2211.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941. 4) Immuno-histochemistry: use ImmunoCruz[™]: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

RESEARCH USE

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



Try Jagged1 (E-12): sc-390177 or Jagged1 (21): sc-135955, our highly recommended monoclonal alternatives to Jagged1 (T-19). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see Jagged1 (E-12): sc-390177.