

Jagged1 (N-17): sc-34473

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, and the expression 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 JAG1 gene.

REFERENCES

1. 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.
4. 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.
5. 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 (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus 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-34473 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

Jagged1 (N-17) 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 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

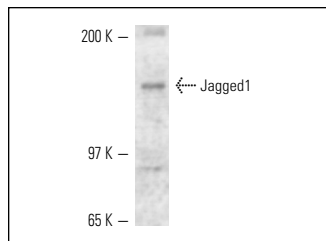
Jagged1 (N-17) is also recommended for detection of Jagged1 in additional species, including canine, bovine and porcine.

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.

DATA



Jagged1 (N-17): sc-34473. Western blot analysis of Jagged1 expression in mouse embryo tissue extract.

SELECT PRODUCT CITATIONS

1. Martin, A., et al. 2015. Lysyl oxidase-like 2 represses Notch1 expression in the skin to promote squamous cell carcinoma progression. *EMBO J.* 34: 1090-1099.

PROTOCOLS

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



Try **Jagged1 (E-12): sc-390177** or **Jagged1 (21): sc-135955**, our highly recommended monoclonal alternatives to Jagged1 (N-17). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **Jagged1 (E-12): sc-390177**.