

Jagged1 (C-20): sc-6011

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 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 Jagged1 gene.

CHROMOSOMAL LOCATION

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

SOURCE

Jagged1 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Jagged1 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-6011 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Jagged1 (C-20) 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) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Jagged1 (C-20) is also recommended for detection of Jagged1 in additional species, including canine, bovine, porcine and avian.

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

Molecular Weight of Jagged1: 150 kDa.

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

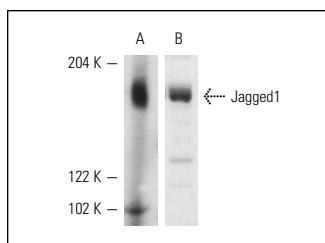
STORAGE

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

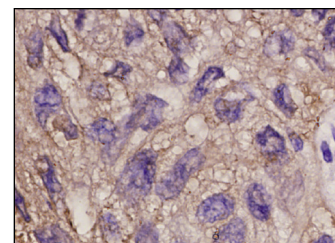
RESEARCH USE

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

DATA



Western blot analysis of Jagged1 expression in mouse embryo extract (A) and RAW 264.7 whole cell lysate (B). Antibodies tested include Jagged1 (C-20): sc-6011 (A) and Jagged1 (H-114): sc-8303 (B).



Jagged1 (C-20): sc-6011. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human lung tumor showing membrane staining.

SELECT PRODUCT CITATIONS

- Sestan, N., et al. 1999. Contact-dependent inhibition of cortical neurite growth mediated by Notch signaling. *Science* 286: 741-746.
- Domínguez-Frutos, E., et al. 2011. N-myc controls proliferation, morphogenesis, and patterning of the inner ear. *J. Neurosci.* 31: 7178-7189.
- Wu, K., et al. 2011. High Jagged1 expression predicts poor outcome in clear cell renal cell carcinoma. *Jpn. J. Clin. Oncol.* 41: 411-416.
- Wu, X., et al. 2011. COUP-TFII switches responses of venous endothelium to atherosclerotic factors through controlling the profile of various inherent genes expression. *J. Cell. Biochem.* 112: 256-264.
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- Yang, Y., et al. 2011. The Notch ligand Jagged2 promotes lung adenocarcinoma metastasis through a miR-200-dependent pathway in mice. *J. Clin. Invest.* 121: 1373-1385.
- Caolo, V., et al. 2011. Soluble Jagged-1 inhibits neointima formation by attenuating Notch-Herp2 signaling. *Arterioscler. Thromb. Vasc. Biol.* 31: 1059-1065.
- Xu, L., et al. 2012. Notch1 activation promotes renal cell carcinoma growth via PI3K/Akt signaling. *Cancer Sci.* 103: 1253-1258.
- Lavoz, C., et al. 2012. Angiotensin II contributes to renal fibrosis independently of Notch pathway activation. *PLoS ONE* 7: e40490.
- Ferreira, A.C., et al. 2012. E-cadherin impairment increases cell survival through Notch-dependent upregulation of Bcl-2. *Hum. Mol. Genet.* 21: 334-343.



Try **Jagged1 (E-12): sc-390177** or **Jagged1 (21): sc-135955**, our highly recommended monoclonal alternatives to Jagged1 (C-20). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **Jagged1 (E-12): sc-390177**.