

Jagged2 (S-16): sc-34476

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 up-regulated 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

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.

CHROMOSOMAL LOCATION

Genetic locus: JAG2 (human) mapping to 14q32.33; Jag2 (mouse) mapping to 12 F1.

SOURCE

Jagged2 (S-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Jagged2 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-34476 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Jagged2 (S-16) is recommended for detection of Jagged2 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Jagged2 (S-16) is also recommended for detection of Jagged2 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for Jagged2 siRNA (h): sc-39672, Jagged2 siRNA (m): sc-39673, Jagged2 shRNA Plasmid (h): sc-39672-SH, Jagged2 shRNA Plasmid (m): sc-39673-SH, Jagged2 shRNA (h) Lentiviral Particles: sc-39672-V and Jagged2 shRNA (m) Lentiviral Particles: sc-39673-V.

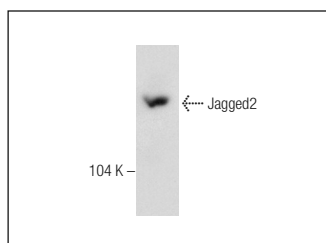
Molecular Weight of Jagged2: 150 kDa.

Positive Controls: mouse spleen extract: sc-2391, Jurkat whole cell lysate: sc-2204 or Jurkat + GM-CSF cell lysate: sc-2279.

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.

DATA



Jagged2 (S-16): sc-34476. Western blot analysis of Jagged2 expression in Jurkat whole cell lysate.

SELECT PRODUCT CITATIONS

1. Zhang, T.H., et al. 2011. Activation of Notch signaling in human tongue carcinoma. *J. Oral Pathol. Med.* 40: 37-45.
2. Zhao, X., et al. 2012. Derivation of myoepithelial progenitor cells from bipotent mammary stem/progenitor cells. *PLoS ONE* 7: e35338.

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 or our catalog for detailed protocols and support products.



Try **Jagged2 (4F10): sc-293433**, our highly recommended monoclonal alternative to Jagged2 (S-16).