SANTA CRUZ BIOTECHNOLOGY, INC.

Jagged2 (4F10): sc-293433

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 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 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 Notch 1. 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.

CHROMOSOMAL LOCATION

Genetic locus: JAG2 (human) mapping to 14q32.33.

SOURCE

Jagged2 (4F10) is a mouse monoclonal antibody raised against amino acids 121-210 representing partial length Jagged2 of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Jagged2 (4F10) is recommended for detection of Jagged2 of 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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

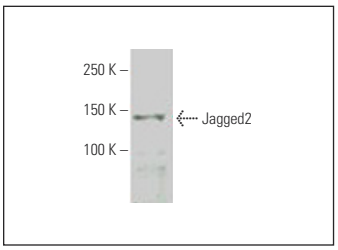
Molecular Weight of Jagged2: 150 kDa.

Positive Controls: COLO 320 HSR whole cell lysate.

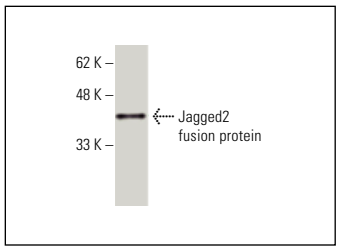
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



Jagged2 (4F10): sc-293433. Western blot analysis of Jagged2 expression in COLO 320 HSR whole cell lysate.



Jagged2 (4F10): sc-293433. Western blot analysis of human recombinant Jagged2 fusion protein.

SELECT PRODUCT CITATIONS

1. Palano, M.T., et al. 2020. Jagged ligands enhance the pro-angiogenic activity of multiple myeloma cells. Cancers 12: 2600.

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.