

# Jagged2 (F-4): sc-515725

## 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

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2. Simpson, P. 1994. *The Notch receptors*. Austin, TX: R.G. Landes Company.
3. Lindsell, C.E., Shawber, C.J., Boulter, J. and Weinmaster, G. 1995. Jagged: a mammalian ligand that activates Notch1. *Cell* 80: 909-917.
4. Valsecchi, C., Ghezzi, C., Ballabio, A. and Rugarli, E.I. 1997. JAGGED2: a putative Notch ligand expressed in the apical ectodermal ridge and in sites of epithelial-mesenchymal interactions. *Mech. Dev.* 69: 203-207.
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6. Eldadah, Z.A., Hamosh, A., Biery, N.J., Montgomery, R.A, Duke, M., Elkins, R. and Dietz, H.C. 2001. Familial tetralogy of Fallot caused by mutation in the jagged1 gene. *Hum. Mol. Genet.* 10: 163-169.

## CHROMOSOMAL LOCATION

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

## SOURCE

Jagged2 (F-4) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 1149-1171 within a C-terminal cytoplasmic domain of Jagged2 of rat origin.

## PRODUCT

Each vial contains 200 µg IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## 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

Jagged2 (F-4) is recommended for detection of Jagged2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

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.

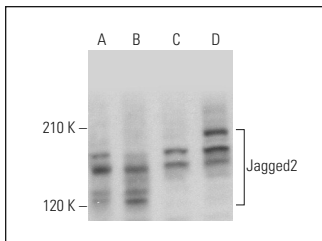
Molecular Weight of Jagged2: 150 kDa.

Positive Controls: MM-142 cell lysate: sc-2246, NAMALWA cell lysate: sc-2234 or RAW 264.7 whole cell lysate: sc-2211.

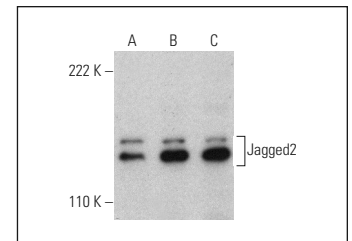
## RECOMMENDED SUPPORT REAGENTS

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 L-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



Jagged2 (F-4): sc-515725. Western blot analysis of Jagged2 expression in RAW 264.7 (A), MM-142 (B), NAMALWA (C) and CCRF-CEM (D) whole cell lysates.



Jagged2 (F-4): sc-515725. Western blot analysis of Jagged2 expression in SR (A), SK-OV-3 (B) and HUV-EC-C (C) whole cell lysates.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.