

Jagged1 (28H8) Rabbit mAb

✓ 100 µl
(10 western blots)

Orders ■ 877-616-CELL (2355)
orders@cellsignal.com
Support ■ 877-678-TECH (8324)
info@cellsignal.com
Web ■ www.cellsignal.com

rev. 02/09/12

This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Entrez-Gene ID #182
Swiss-Prot Acc. #P78504

Applications	Species Cross-Reactivity*	Molecular Wt.	Isotype
W, IP Endogenous	H, M, (R)	180 kDa	Rabbit IgG**

Background: Notch signaling is activated upon engagement of the Notch receptor with its ligands, the DSL (Delta, Serrate, Lag2) proteins of single-pass type I membrane proteins. The DSL proteins contain multiple EGF-like repeats and a DSL domain that is required for binding to Notch (1,2). Five DSL proteins have been identified in mammals: Jagged1, Jagged2, Delta-like (DLL) 1, 3 and 4 (3). Ligand binding to the Notch receptor results in two sequential proteolytic cleavages of the receptor by the ADAM protease and the γ -secretase complex. The intracellular domain of Notch is released and then translocates to the nucleus where it activates transcription. Notch ligands may also be processed in a way similar to Notch, suggesting a bi-directional signaling through receptor-ligand interactions (4-6).

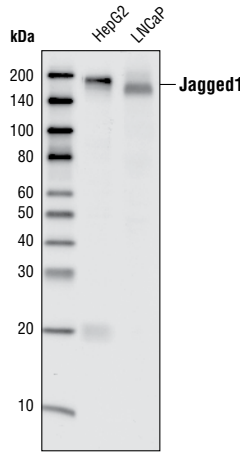
Mutation in Jagged1 is associated with Alagille syndrome, an autosomal dominant disorder characterized by abnormal development of liver, heart, skeleton, eye, and face (7, 8) and Tetralogy of Fallot (ToF), a common form of complex congenital heart disease (9). Jagged1 expression is associated with prostate cancer metastasis and recurrence (10).

Specificity/Sensitivity: Jagged1 (28H8) Rabbit mAb detects endogenous levels of total Jagged1 protein. It does not cross-react with Jagged2.

Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Glu1140 (intracellular region) of human Jagged1.

Background References:

- (1) Wilson, A. and Radtke, F. (2006) *FEBS Lett.* 580, 2860-2868.
- (2) Hansson, E.M. et al. (2004) *Semin. Cancer Biol.* 14, 320-328.
- (3) Chiba, S. (2006) *Stem Cells* 24, 2437-2447.
- (4) Bland, C.E. et al. (2003) *J. Biol. Chem.* 278, 13607-13610.
- (5) Six, E. et al. (2003) *Proc. Natl. Acad. Sci. USA* 100, 7638-7643.



Western blot analysis of total cell lysates from HepG2 and LNCaP cells, using Jagged1 (28H8) Rabbit mAb.

- (6) LaVoie, M.J. and Selkoe, D.J. (2003) *J. Biol. Chem.* 278, 34427-34437.
- (7) Li, L. et al. (1997) *Nat. Genet.* 16, 243-251.
- (8) Röpke, A. et al. (2003) *Hum. Mutat.* 21, 100.
- (9) Eldadah, Z.A. et al. (2001) *Hum. Mol. Genet.* 10, 163-169.
- (10) Santagata, S. et al. (2004) *Cancer Res* 64, 6854-6857.

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:

Western blotting 1:1000
Immunoprecipitation 1:50

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Rabbit monoclonal antibody is produced under license (granting certain rights including those under U. S. Patents No. 5,675,063 and 7,429,487) from Eptomics, Inc.