

**JAG1 Antibody**  
Catalog # ASC11880**Specification**

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**JAG1 Antibody - Product Information**

Application	WB, IHC, IF
Primary Accession	<a href="#">P78504</a>
Other Accession	<a href="#">NP_000205</a> , <a href="#">4557679</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	Predicted: 134 kDa

Application Notes	<b>Observed: 130 kDa KDa</b> <b>JAG1 antibody can be used for detection of JAG1 by Western blot at 1 - 2 µg/ml.</b> <b>Antibody can also be used for immunohistochemistry starting at 5 µg/mL.</b> <b>For immunofluorescence start at 20 µg/mL.</b>
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**JAG1 Antibody - Additional Information**Gene ID **182****Target/Specificity**

JAG1; JAG1 antibody is human, mouse and rat reactive. At least two isoforms of JAG1 are known to exist; this antibody will detect both isoforms.

**Reconstitution & Storage**

JAG1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

**Precautions**

JAG1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**JAG1 Antibody - Protein Information**

Name JAG1

Synonyms JAGL1

**Function**

Ligand for multiple Notch receptors and involved in the mediation of Notch signaling (PubMed:<a href="http://www.uniprot.org/citations/18660822" target="\_blank">18660822</a>, PubMed:<a href="http://www.uniprot.org/citations/20437614" target="\_blank">20437614</a>). May be involved in cell-fate decisions during hematopoiesis (PubMed:<a href="http://www.uniprot.org/citations/9462510" target="\_blank">9462510</a>). Seems to be involved in early and late stages of mammalian cardiovascular development. Inhibits myoblast differentiation (By similarity). Enhances fibroblast growth factor-induced angiogenesis (in vitro).

### Cellular Location

Membrane; Single-pass type I membrane protein. Cell membrane

### Tissue Location

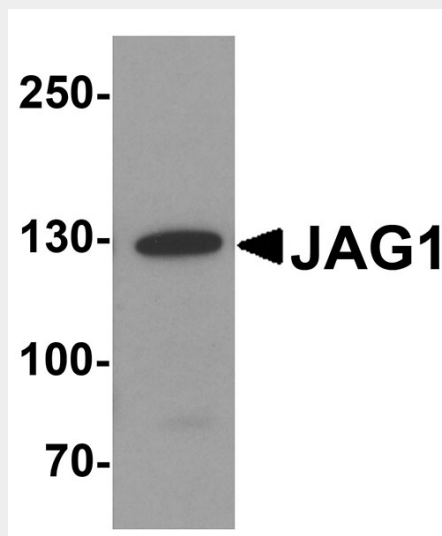
Widely expressed in adult and fetal tissues. In cervix epithelium expressed in undifferentiated subcolumnar reserve cells and squamous metaplasia. Expression is up-regulated in cervical squamous cell carcinoma. Expressed in bone marrow cell line HS-27a which supports the long-term maintenance of immature progenitor cells

### JAG1 Antibody - Protocols

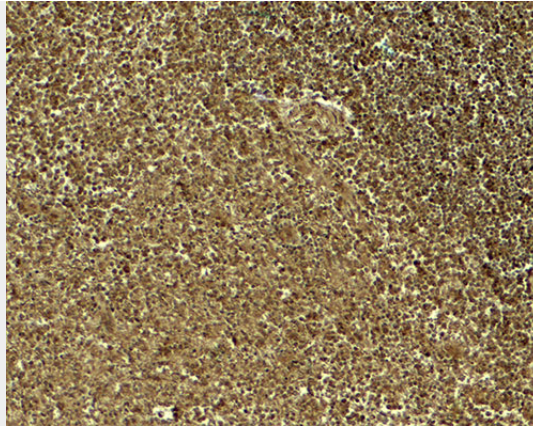
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

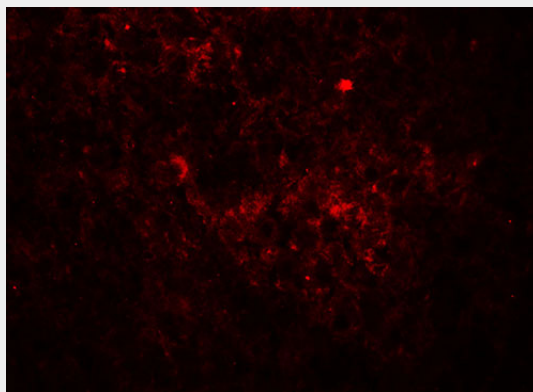
### JAG1 Antibody - Images



Western blot analysis of JAG1 in HeLa cell lysate with JAG1 antibody at 1  $\mu$ g/ml.



Immunohistochemistry of JAG1 in human spleen tissue with JAG1 antibody at 5 µg/ml.



Immunofluorescence of JAG1 in human spleen tissue with JAG1 antibody at 20 µg/ml.

### **JAG1 Antibody - Background**

The LIN-12/Notch family of transmembrane receptors plays a central role in development by regulating cell fate decisions (1). Ligands for Notch include JAG1, JAG2 and Delta. JAG1 is one of the DSL (Delta, Serrate, Lag2) transmembrane proteins that can activate Notch. It is involved in mammalian cardiovascular development and in cell-fate decisions during hematopoiesis (1,2). JAG1 is widely expressed in adult and fetal tissues and the mutation of the JAG1 gene is associated with Familial Tetralogy of Fallot (3). JAG1 expression is associated with prostate cancer metastasis and is up-regulated in cervical squamous cell carcinoma (4,5).

### **JAG1 Antibody - References**

- Lai EC. Notch signaling: control of cell communication and cell fate. *Development* 2004; 131:965-73.
- Milner LA, Kopan R, Martin DI, et al. A human homologue of the *Drosophila* developmental gene, Notch, is expressed in CD34+ hematopoietic precursors. *Blood* 1994; 83:2057-62.
- Guida V, Chiappe F, Ferese R, et al. Novel and recurrent JAG1 mutations in patients with tetralogy of Fallot. *Clin. Genet.* 2011; 80:591-4.
- Santagata S, Demichelis F, Riva A, et al. JAGGED1 expression is associated with prostate cancer metastasis and recurrence. *Cancer Res.* 2004; 64:6854-7.