10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

JAG1 Antibody

Catalog # ASC11880

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	P78504
Other Accession	NP_000205, 4557679
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	133799
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	JAG1 antibody can be used for detection of JAG1 by Western blot at 1 - 2 g/ml. Antibody can also be used for immunohistochemistry starting at 5 g/mL. For immunofluorescence start at 20 g/mL.

Additional Information

Gene ID	182
Other Names	Protein jagged-1, Jagged1, hJ1, CD339, JAG1, JAGL1
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℃ for three months and -20℃, stable for up to one year.
Precautions	JAG1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	JAG1
Synonyms	JAGL1
Function	Ligand for multiple Notch receptors and involved in the mediation of Notch signaling (PubMed:18660822, PubMed:20437614). May be involved in cell-fate decisions during hematopoiesis (PubMed:9462510). 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

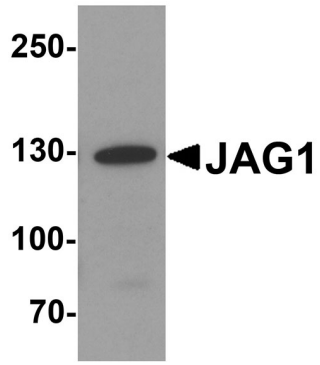
Background

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 Tetrology of Fallot (3). JAG1 expression is associated with prostate cancer metastasis and is up-regulated in cervical squamous cell carcinoma (4,5).

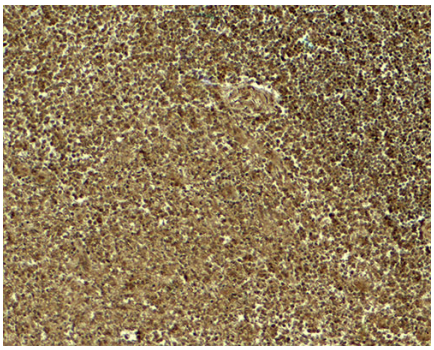
References

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. Blood1994; 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.

Images

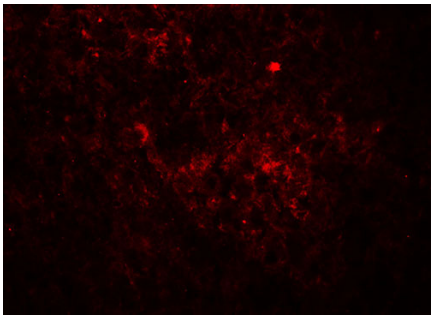


Western blot analysis of JAG1 in HeLa cell lysate with JAG1 antibody at 1 µg/ml.



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.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.