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Datasheet for 200-401-698

Jagged 1 Antibody

Overview

Description:	Anti-Jagged-1 (RABBIT) Antibody - 200-401-698
Item No.:	200-401-698
Size:	500 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse
Host Species:	Rabbit

Product Details

Background:	Anti-Jagged 1 Antibody recognizes the Jagged 1 protein encoded by the JAG1 gene, that is the human homolog of the Drosophilia jagged protein. Human Jagged 1 is the ligand for multiple Notch receptors and mediation of Notch signaling. Jagged 1 signaling through Notch 1 has also been shown to play a role in hematopoiesis. Mutations that alter the Jagged 1 protein cause Alagille syndrome, deafness, congenital heart defects, and posterior embryotoxon. Anti-Jagged-1 Antibody is useful for researchers interested in Notch activation, Growth Factor activities, and Cardiovascular health.
Synonyms:	rabbit anti-Jagged 1 Antibody, rabbit anti-Jagged1 Antibody, rabbit anti-Jagged-1 Antibody, Ser 1 antibody, AGS antibody, AHD antibody, AWS antibody, CD 339 antibody, CD339 antibody, CD339 antigen antibody, Headturner antibody, HJ1 antibody, Htu antibody
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	JAG1
Reactivity:	Human, Mouse
Immunogen Type:	Conjugated Peptide

Immunogen:	This protein A purified Jagged 1 antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to amino acids near the N-terminus of human Jagged-1 protein.
Purity/Specificity:	This protein A purified antibody is directed against human Jagged-1 protein. The product was purified from mono-specific antiserum by affinity chromatography. A BLAST analysis was used to suggest cross reactivity with Jagged-1 protein from human, chimpanzee, rat and mouse based on 100% homology with the immunizing sequence. Partial reactivity is expected against dog (81%) and Xenopus laevis (85%) based on partial sequence homologies as indicated. Reactivity against homologues from other sources is not known.
Relevant Links:	• UniProtKB - P78504 • NCBI - 4557679 • GeneID - 182

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-Jagged-1 antibody has been tested for use in ELISA, immunohistochemistry, immunofluorescence microscopy and western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 150 kDa in size corresponding to Jagged-1 in mouse liver, human liver and human lung whole cell lysates.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:20,000 - 1:100,000
IF:	1:200 - 1:1,000
IHC:	1:100 - 1:500
WB:	1:500 - 1:2,000

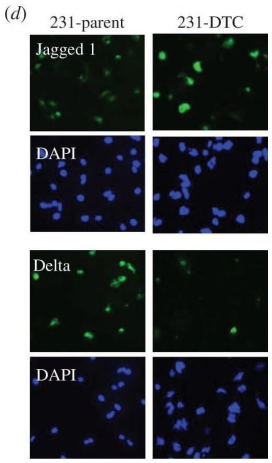
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.15 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

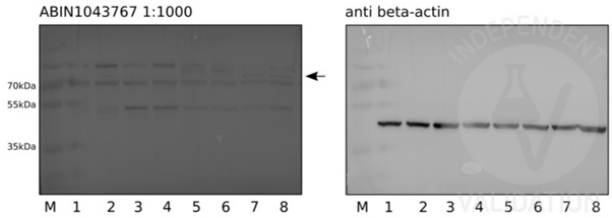
Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

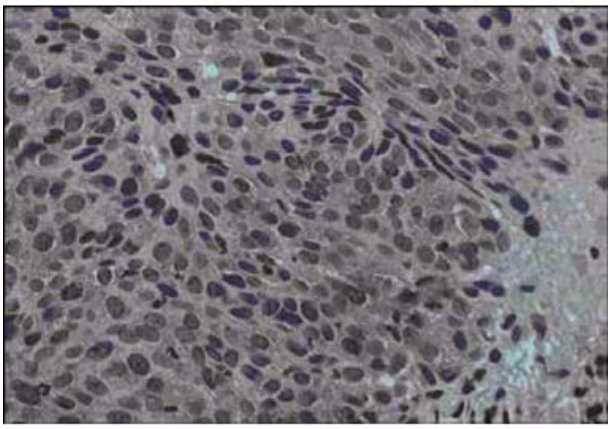
Images



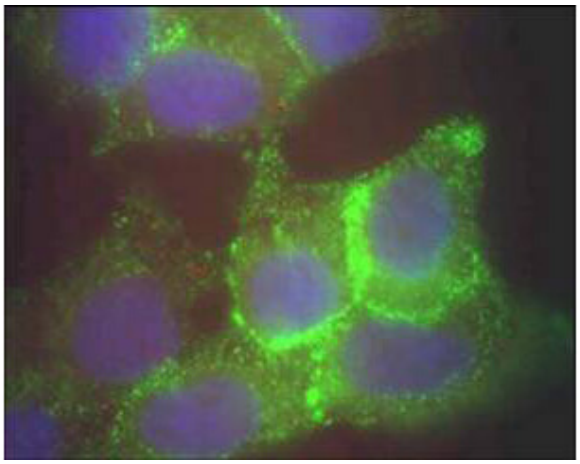
Immunocytochemistry
(a) Representative confocal microscopy shows CD44, CD24 and cleaved notch (NICD) in a population of drug naive MDA-MB-231. Yellow arrows indicate CD44HiCD24Lo (M) population of cells and the white arrows indicate the CD44HiCD24Hi (E/M) cells. Histogram (right panel) shows quantification of NICD in the distinct phenotype populations (M versus E/M). N = 3 biological replicates. (b) Schematic describes the experimental protocol to generate drug-tolerant cells (DTCs) parental MDA-MB-231 cells were treated with docetaxel at 100 nM (20× the IC50) and subsequently selected by substrate re-attachment and acute population outgrowth. (c) Representative confocal microscopy shows CD44, CD24 and NICD in the MDA-MB-231 parent and DTC populations. Right panel shows quantification of fluorescence intensity of each signal determined by at least 25 individual fields. N = 3 biological replicates. (d) Representative confocal microscopy shows Jagged and Delta expression in MDA-MB-231 parent and DTC. DAPI nuclear stain (blue). N = 3 biological replicates. Figure provided by CiteAb. Source: J R Soc Interface, PMID: 27170649.



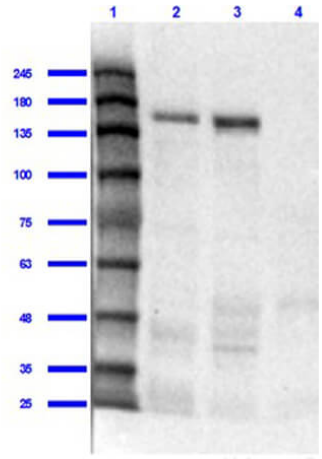
Western Blot
Western blot Anti-Jagged-1 (RABBIT) Antibody.
Human pluripotent stem cells (lanes 1 and 2), definite endoderm cells (lanes 3 and 4), pancreatic endoderm cells (lanes 5 and 6), and pancreatic progenitors (lanes 7 and 8).
Primary Antibody: Anti-Jagged-1 used at a 1:1000 (30sec exposure) overnight at 4°C. Beta-actin served as loading control at 1:2000 at RT for 1hr.
Secondary Antibody: donkey anti-rabbit HRP conjugated antibody or donkey anti-mouse HRP conjugated antibody diluted 1:5000 for 1h at RT.
Independently Validated by antibodies-online GmbH (p/n ABIN1043767/ ABIN129524) courtesy of Ulm University Hospital.



Immunohistochemistry
Immunohistochemical staining of human cervical cancer tissue (40X magnification) using Rockland's Protein A purified anti-Jagged-1 antibody. Tissue was fixed with formalin and embedded in paraffin. Hematoxylin was used to counter-stain cells. A 1:100 dilution of primary antibody was used. Personal Communication. Martin Kast Laboratory.



Immunofluorescence Microscopy
Immunofluorescence microscopy using Rockland's Protein A purified anti-Jagged-1 antibody of human corneal epithelial cells. Primary antibody was used at a 1:500 dilution. The Jagged1 (green staining) is localized to the cytoplasm and is consistent with reports in the literature. The nucleus is stained with Bis benzamine (blue). Personal Communication. Aihua Ma, Univdersity of Cardiff.



Western Blot
Western Blot of Rabbit Anti-Jagged 1 Antibody. Lane 1: Opal Prestained MW marker (p/n MB-210-0500). Lane 2: Mouse Liver Whole Cell Lysate [10µg] (p/n W10-000-T020). Lane 3: Human Liver Whole Cell Lysate [10µg]. Lane 4: Human Lung Whole Cell Lysate [10µg]. Primary Antibody: Anti-Jagged 1 at 1:1000 overnight at 2-8°C. Secondary Antibody: Goat Anti-Rabbit IgG Peroxidase Conjugated (p/n 611-103-122) at 1:70000 for 30mins at RT. Blocking Buffer: BlockOut Buffer (p/n MB-073) for 1hr RT. Predicted Molecular Weight: 113kDa. Exposure: 30 sec.

References

- Boareto et al. Notch-Jagged signalling can give rise to clusters of cells exhibiting a hybrid epithelial/mesenchymal phenotype. *Journal of the Royal Society Interface* (2016)

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