

Product datasheet

Anti-Jagged1 antibody [EPR4290] ab109536

KO VALIDATED Recombinant RabMAB

★★★★★ 4 Abreviews 41 References 6 Images

Overview

Product name	Anti-Jagged1 antibody [EPR4290]
Description	Rabbit monoclonal [EPR4290] to Jagged1
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P Unsuitable for: ICC/IF
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	HepG2 and NIH:OVCAR-3 cell lysate. Bladder cancer tissue. HeLa cells.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAB[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAB[®] patents.</p> <p>We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol, 59% PBS, 0.05% BSA

Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR4290
Isotype	IgG

Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab109536 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ (2)	1/1000. Predicted molecular weight: 134 kDa.
IHC-P	★★★★★ (1)	1/200 - 1/300. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See IHC antigen retrieval protocols .

Application notes Is unsuitable for ICC/IF.

Target

Function Ligand for multiple Notch receptors and involved in the mediation of Notch signaling. May be involved in cell-fate decisions during hematopoiesis. 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).

Tissue specificity 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.

Involvement in disease Defects in JAG1 are the cause of Alagille syndrome type 1 (ALGS1) [MIM:118450]. Alagille syndrome is an autosomal dominant multisystem disorder defined clinically by hepatic bile duct paucity and cholestasis in association with cardiac, skeletal, and ophthalmologic manifestations. There are characteristic facial features and less frequent clinical involvement of the renal and vascular systems.

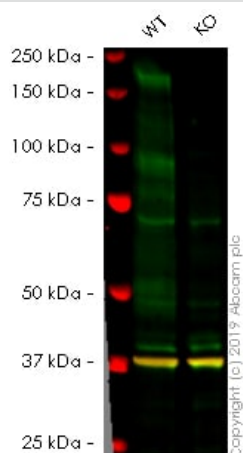
Defects in JAG1 are a cause of tetralogy of Fallot (TOF) [MIM:187500]. TOF is a congenital heart anomaly which consists of pulmonary stenosis, ventricular septal defect, dextroposition of the aorta (aorta is on the right side instead of the left) and hypertrophy of the right ventricle. This condition results in a blue baby at birth due to inadequate oxygenation. Surgical correction is emergent.

Sequence similarities Contains 1 DSL domain.
Contains 15 EGF-like domains.

Developmental stage Expressed in 32-52 days embryos in the distal cardiac outflow tract and pulmonary artery, major arteries, portal vein, optic vesicle, otocyst, branchial arches, metanephros, pancreas, mesocardium, around the major bronchial branches, and in the neural tube.

Cellular localization Membrane.

Images



Western blot - Anti-Jagged1 antibody [EPR4290] (ab109536)

All lanes : Anti-Jagged1 antibody [EPR4290] (ab109536) at 1/10000 dilution

Lane 1 : Wild-type HAP1 whole cell lysate

Lane 2 : JAG1 knockout HAP1 whole cell lysate

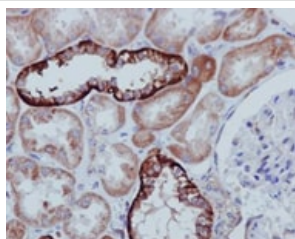
Lysates/proteins at 20 µg per lane.

Predicted band size: 134 kDa

Observed band size: 180 kDa

Lanes 1 - 2: Merged signal (red and green). Green - ab109536 observed at 180 kDa. Red - loading control, ab9484, observed at 37 kDa.

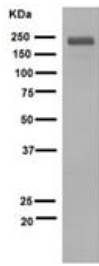
ab109536 was shown to recognize in wild-type HAP1 cells as signal was lost at the expected MW in JAG1 knockout cells. Additional cross-reactive bands were observed in the wild-type and knockout cells. Wild-type and JAG1 knockout samples were subjected to SDS-PAGE. Ab109536 and ab9484 (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 1/10000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed ab216773 and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed ab216776 secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Jagged1 antibody [EPR4290] (ab109536)

Immunohistochemical staining of paraffin embedded human kidney using purified ab109536 at a dilution of 1/300. A pre-diluted HRP polymer for rabbit IgG was used as the secondary and the sample was counter stained with hematoxylin.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Western blot - Anti-Jagged1 antibody [EPR4290] (ab109536)

Anti-Jagged1 antibody [EPR4290] (ab109536) at 1/1000 dilution (Purified) + HepG2 at 10 µg

Secondary

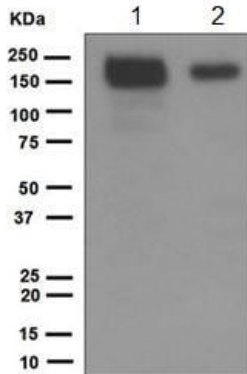
HRP goat anti-rabbit (H+L) at 1/1000 dilution

Predicted band size: 134 kDa

Observed band size: 180 kDa

Blocking buffer: 5% NFDm/TBST

Dilution buffer: 5% NFDm/TBST



Western blot - Anti-Jagged1 antibody [EPR4290] (ab109536)

All lanes : Anti-Jagged1 antibody [EPR4290] (ab109536) at 1/10000 dilution (Unpurified)

Lane 1 : HepG2 cell lysate

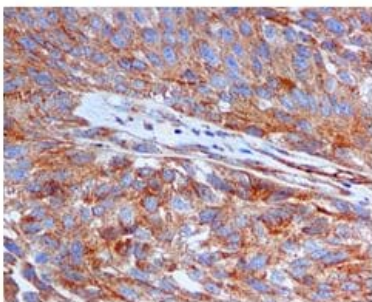
Lane 2 : NIH:OVCA3 cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : HRP-labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 134 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Jagged1 antibody [EPR4290] (ab109536)

Immunohistochemical staining of Jagged1 in paraffin-embedded bladder cancer tissue using unpurified ab109536 at a dilution of 1/250.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-Jagged1 antibody [EPR4290] (ab109536)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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