abcam

Product datasheet

Anti-Jagged1 antibody [EPR4290] - BSA and Azide free ab184785

KO VALIDATED Recombinant RabMAb

2 References 3 Images

Overview

Product name	Anti-Jagged1 antibody [EPR4290] - BSA and Azide free
Description	Rabbit monoclonal [EPR4290] to Jagged1 - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** WB **Unsuitable for:** ICC/IF or IHC-P
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	WB: HepG2 and HUVEC whole cell lysate.
General notes	ab184785 is the carrier-free version of **ab109536**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc. This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit

monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.20 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR4290
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab184785 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		Use at an assay dependent concentration. Predicted molecular weight: 134 kDa.

Application notes Is unsuitable for ICC/IF or IHC-P.

Target

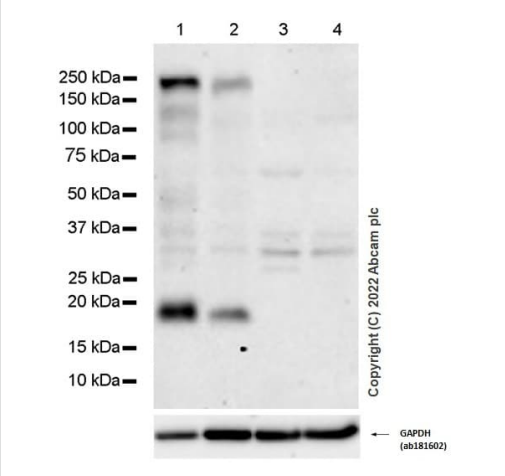
Function Ligand for multiple Notch receptors and involved in the mediation of Notch signaling. May be involved in cell-fate decisions during hematopoiesis. Seems to be involved in early and late stages of mammalian cardiovascular development. Inhibits myoblast differentiation (By similarity). Enhances 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] - BSA and Azide free (ab184785)

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

Lane 1 : HepG2 (human hepatocellular carcinoma epithelial cell), whole cell lysate
Lane 2 : HUVEC (human umbilical vein endothelial cell), whole cell lysate
Lane 3 : Jurkat (human T cell leukemia T lymphocyte), whole cell lysate
Lane 4 : MOLT-4 (human lymphoblastic leukemia T lymphoblast), whole cell lysate

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 134 kDa
Observed band size: 200,23 kDa

Exposure time: 180 seconds

Blocking buffer and concentration: 5% NFDM/TBST
Diluting buffer and concentration: 5% NFDM /TBST

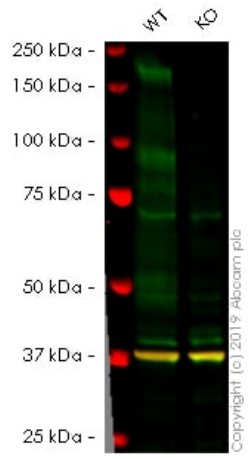
Negative controls: Jurkat and MOLT-4 whole cell lysate (PMID: 30231940)

200-kDa full length and 23-kDa C-terminal JAG1 are observed. The molecular weights are consistent with what has been described in the literature (PMID: 30890522, 30890522).

This blot was developed using a high sensitivity ECL substrate.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and

sodium azide (**ab109536**).



Western blot - Anti-Jagged1 antibody [EPR4290] - BSA and Azide free (ab184785)

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

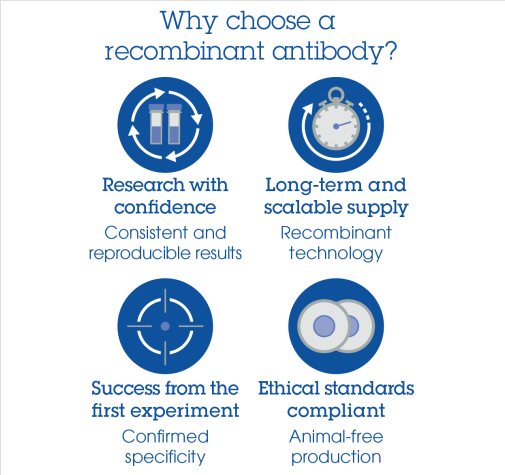
Lysates/proteins at 20 µg per lane.

Predicted band size: 134 kDa
Observed band size: 200 kDa

Lanes 1 - 2: Merged signal (red and green). Green - **ab109536** observed at 200 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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab109536**).



Anti-Jagged1 antibody [EPR4290] - BSA and Azide free (ab184785)

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