# abcam

# Product datasheet

# Anti-Jagged1 antibody [EPR4290] ab109536



★★★★★ 4 Abreviews 52 References 画像数 5

#### 製品の概要

製品名 Anti-Jagged1 antibody [EPR4290]

製品の詳細 Rabbit monoclonal [EPR4290] to Jagged1

由来種 Rabbit

アプリケーション **適用あり:** WB

適用なし: ICC/IF or IHC-P

種交差性 交差種: Human

交差が予測される動物種: Mouse, Rat 4

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール WB: HepG2 and HUVEC whole cell lysate, NIH:OVCAR-3 cell lysate.

特記事項 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**.

#### 製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at -20°C.

バッファー pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 40% Glycerol, 59% PBS, 0.05% BSA

精製度 Protein A purified

ポリ/モノ モノクローナル クローン名 **EPR4290** 

アイソタイプ lgG

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab109536の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB	<b>★★★★★ (2)</b>	1/1000 - 1/10000. Predicted molecular weight: 134 kDa.

追加情報

Is unsuitable for ICC/IF or IHC-P.

#### ターゲット情報

機能

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).

組織特異性

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.

関連疾患

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.

配列類似性

Contains 1 DSL domain.

Contains 15 EGF-like domains.

発生段階

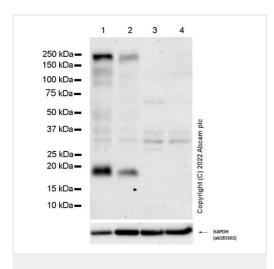
Expressed in 32-52 days embryos in the distal cardiac outflow tract and pulmonary artery, major arteries, portal vein, optic vesicle, otocyst, branchial arches, metanephros, pancreas,

mesocardium, around the major bronchial branches, and in the neural tube.

細胞内局在

Membrane.

# 画像



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

**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 lgG H&L (HRP) (ab97051) at 1/20000 dilution

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

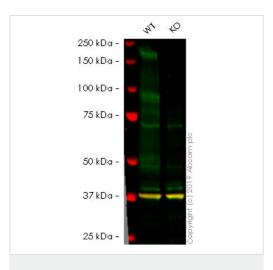
Exposure time: 180 seconds

**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.



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

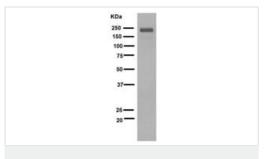
Lane 2: JAG1 knockout HAP1 whole cell lysate

Lysates/proteins at 20 µg per lane.

**Predicted band size:** 134 kDa **Observed band size:** 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 <a href="mailto:ab9484">ab9484</a> (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 <a href="mailto:ab216773">ab216773</a> and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed <a href="mailto:ab216776">ab216776</a> secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



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

Anti-Jagged1 antibody [EPR4290] (ab109536) at 1/1000 dilution (Purified) + HepG2 at  $10 \mu g$ 

#### Secondary

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

Predicted band size: 134 kDa Observed band size: 200 kDa Blocking buffer: 5% NFDM/TBST

Dilution buffer: 5% NFDM/TBST

KDa 1 2

250 —
150 —
100 —
75 —
50 —
37 —
25 —
20 —
15 —
10 —

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

All lanes: Anti-Jagged1 antibody [EPR4290] (ab109536) at

1/10000 dilution (Unpurified)

Lane 1: HepG2 cell lysate

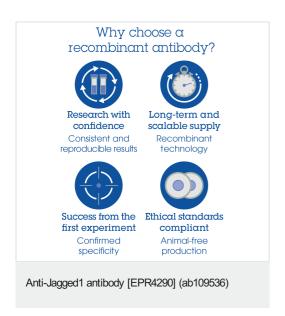
Lane 2: NIH:OVCAR-3 cell lysate

Lysates/proteins at 10 µg per lane.

## **Secondary**

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

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



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