Overview

Product name: Anti-Jagged1 antibody
Description: Rabbit polyclonal to Jagged1
Host species: Rabbit
Tested applications: Suitable for: ICC/IF, IHC-P, WB
Species reactivity: Reacts with: Mouse, Human
Predicated to work with: Rat
Immunogen: Synthetic peptide: N-KASRGNDRNRVLPFS conjugated to KLH, corresponding to amino acids 110-125 of Human Jagged1

Properties

Form: Liquid
Storage instructions: Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer: pH: 7.20
Preservative: 0.01% Sodium azide
 Constituents: 0.42% Potassium phosphate, 0.88% Sodium chloride
Purity: Protein A purified
Clonality: Polyclonal
Isotype: IgG

Applications

Our Abpromise guarantee covers the use of ab7771 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>ICC/IF</td>
<td>★★★★★</td>
<td>Use at an assay dependent concentration.</td>
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<tr>
<td>Application</td>
<td>Abreviews</td>
<td>Notes</td>
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<tr>
<td>IHC-P</td>
<td>⭐⭐⭐⭐(rank: 1/100)</td>
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<td>WB</td>
<td>⭐⭐⭐⭐⭐</td>
<td>1/500. Detects a band of approximately 150 kDa (predicted molecular weight: 134 kDa). 150 kDa in mouse liver lysate and a 75 kDa band in human brain and kidney lysates.</td>
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**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.
Formalin-fixed paraffin embedded IHC of normal human cervical tissues (40x magnification) stained with ab7771 (1/100 dilution). The slides were counterstained with hematoxylin.

Staining of Human corneal epithelial cells with anti-Jagged1 (ab7771, 1/500). The Jagged1 (green staining) is localised to the cytoplasm and cell nucleus and is consistent with reports in the literature. The nucleus is stained with Bisbenzimide (1/500, blue staining).
Formalin-fixed paraffin embedded IHC of human cervical cancer tissues (40x magnification) stained with ab7771 (1/100 dilution). The slides were counterstained with hematoxylin.

Western blot - Anti-Jagged1 antibody (ab7771)

ab7771 Rabbit polyclonal to Jagged1 (1/500) with secondary Goat anti-rabbit IgG antibody ab6721 (1/5000)

Exposure time: 1 minute. Expected molecular weight: 134 kDa

Lanes 1 to 3 and 5: 20µg of cell lysate per lane
Lane 4: 20 µl of 1x LDS loading buffer

Lane 1: Human Brain tissue lysate
Lane 2: Human Kidney tissue Lysate
Lane 3: Human liver tissue lysate
Lane 4: 1x LDS loading buffer
Lane 5: Mouse liver lysate

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