Product datasheet

Anti-DLL4 antibody ab7280

Overview

Product name: Anti-DLL4 antibody
Description: Rabbit polyclonal to DLL4
Host species: Rabbit
Tested applications: Suitable for: IHC-P, WB, ICC/IF, ELISA
Species reactivity: Reacts with: Mouse, Human
Immunogen: Synthetic peptide: AWHAPGDDLRPEAL-C conjugated to KLH, corresponding to amino acids 121-134 of Human Delta4.
Positive control: Recombinant human DLL4 protein (ab84081)

Properties

Form: Liquid
Storage instructions: Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer: pH: 7.20
Preservative: 0.01% Sodium azide
Constituents: 0.42% Potassium phosphate, 0.87% Sodium chloride
Purity: Immunogen affinity purified
Clonality: Polyclonal
Isotype: IgG

Applications

Our Abpromise guarantee covers the use of ab7280 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.
**Function**
Plays a role in the Notch signaling pathway. Activates Notch-1 and Notch-4.

**Tissue specificity**
Expressed in vascular endothelium.

**Sequence similarities**
Contains 1 DSL domain.
Contains 8 EGF-like domains.

**Domain**
The Delta-Serrate-Lag2 (DSL) domain is required for binding to the Notch receptor.

**Post-translational modifications**
Ubiquitinated by MIB (MIB1 or MIB2), leading to its endocytosis and subsequent degradation.

**Cellular localization**
Membrane.

---

**Application** | **Abreviews** | **Notes**
--- | --- | ---
IHC-P | | 1/50.

**WB**
1/500 - 1/2500. Detects a band of approximately 74 kDa (predicted molecular weight: 74 kDa). The levels of DLL4 in endogenous samples may be low. Abcam has not been successful in generating western blot data using endogenous samples, but can demonstrate the specificity using recombinant proteins and overexpressing cell lysates. Some customers have been successful using ab7280 for these samples - please see published references below.

**ICC/IF**
Use at an assay dependent concentration.

**ELISA**
1/10000 - 1/50000.

---

### Target

**Function**
Plays a role in the Notch signaling pathway. Activates Notch-1 and Notch-4.

**Tissue specificity**
Expressed in vascular endothelium.

**Sequence similarities**
Contains 1 DSL domain.
Contains 8 EGF-like domains.

**Domain**
The Delta-Serrate-Lag2 (DSL) domain is required for binding to the Notch receptor.

**Post-translational modifications**
Ubiquitinated by MIB (MIB1 or MIB2), leading to its endocytosis and subsequent degradation.

**Cellular localization**
Membrane.

---

### Images

**All lanes**: Anti-DLL4 antibody (ab7280) at 1/1000 dilution

**Lane 1**: Recombinant human DLL4 at 0.05 µg
**Lane 2**: Whole cell lysate from HEK293 over-expressing human DLL4. at 10 µg
**Lane 3**: Whole cell lysate from control HEK293. at 10 µg

**Secondary**
**All lanes**: Peroxidase labelled anti-rabbit antibody at 1/40000 dilution

Performed under reducing conditions.

**Predicted band size**: 74 kDa
This blot was produced under denaturing, reducing conditions. After transfer, the membrane was blocked for half an hour before being incubated overnight at 4°C with rabbit polyclonal to DLL4 (ab7280; diluted 1:1000). Antibody binding was detected using peroxidase labelled anti-rabbit antibody (diluted 1:40,000) for half an hour at room temperature and visualised using ECL development solution.

IHC image of ab7280 staining in human kidney formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab7280, 5µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

ICC/IF image of ab7280 stained Hek293 cells. The cells were 4% PFA fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab7280, 1µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
• Valid for 12 months from date of delivery
• Response to your inquiry within 24 hours
• We provide support in Chinese, English, French, German, Japanese and Spanish
• Extensive multi-media technical resources to help you
• We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors