# abcam

## Product datasheet

## Anti-RBPJK antibody [EPR13479] ab180588

Recombinant RabMAb

★★★★★ 3 Abreviews 15 References

8 Images

#### Overview

**Product name** Anti-RBPJK antibody [EPR13479]

**Description** Rabbit monoclonal [EPR13479] to RBPJK

**Host species** Rabbit

**Tested applications** Suitable for: Flow Cyt (Intra), WB, ICC/IF

Unsuitable for: IHC-P or IP

Species reactivity Reacts with: Mouse, Rat, Human

**Immunogen** Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: 293 cells, MCF7, Raji, F9, C9, and HeLa cell line lysates; ICC/IF: 293T cells; Flow Cyt (intra):

HEK-293;

**General notes** 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  $\mathsf{RabMAb}^{\texttt{®}}$  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 short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

Preservative: 0.01% Sodium azide Storage buffer

Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

**Purity** Protein A purified

Clonality Monoclonal Clone number EPR13479

Isotype lgG

#### **Applications**

#### The Abpromise quarantee

Our **Abpromise guarantee** covers the use of ab180588 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
Flow Cyt (Intra)		1/100.
WB	<b>★★★★☆</b> (2)	1/1000 - 1/10000. Detects a band of approximately 60 kDa (predicted molecular weight: 56 kDa).
ICC/IF	<b>★★★★☆ (1)</b>	1/100.

#### **Application notes**

Is unsuitable for IHC-P or IP.

## **Target**

#### **Function**

Transcriptional regulator that plays a central role in Notch signaling, a signaling pathway involved in cell-cell communication that regulates a broad spectrum of cell-fate determinations. Acts as a transcriptional repressor when it is not associated with Notch proteins. When associated with some NICD product of Notch proteins (Notch intracellular domain), it acts as a transcriptional activator that activates transcription of Notch target genes. Probably represses or activates transcription via the recruitment of chromatin remodeling complexes containing histone deacetylase or histone acetylase proteins, respectively. Specifically binds to the immunoglobulin kappa-type J segment recombination signal sequence.

## Sequence similarities

Belongs to the Su(H) family. Contains 1 IPT/TIG domain.

## **Cellular localization**

Nucleus. Cytoplasm. Mainly nuclear, upon interaction with RITA/C12orf52, translocates to the

cytoplasm, down-regulating the Notch signaling pathway.

#### **Images**



Western blot - Anti-RBPJK antibody [EPR13479] (ab180588)

**All lanes :** Anti-RBPJK antibody [EPR13479] (ab180588) at 1/1000 dilution (Purified)

**Lane 1 :** Raji (Human Burkitt's lymphoma B lymphocyte) whole cell lysates at 15 μg

**Lane 2 :** MCF7 (Human breast adenocarcinoma epithelial cell) whole cell lysates at 15  $\mu g$ 

**Lane 3 :** F9 (Mouse embryonal carcinoma epithelial cell) whole cell lysates at 15  $\mu g$ 

Lane 4: C6 (Rat glial tumor glial cell) whole cell lysates at 20 µg

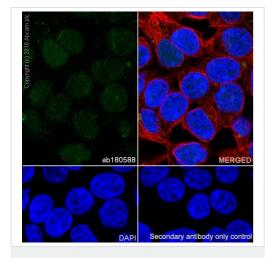
#### Secondary

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

Predicted band size: 56 kDa

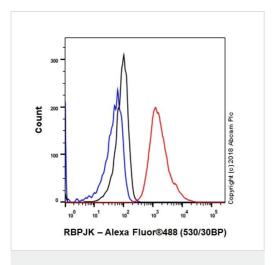
Observed band size: 56-60 kDa

The double bands are consistent with what has been described in the literature PMID: 9102301 and 24603501



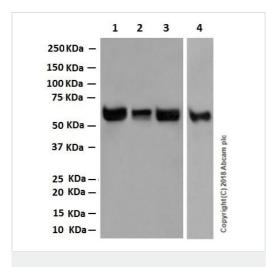
Immunocytochemistry/ Immunofluorescence - Anti-RBPJK antibody [EPR13479] (ab180588)

Immunocytochemistry/ Immunofluorescence analysis of 293T (Human embryonic kidney epithelial cell) cells labeling RBPJK with Purified ab180588 at 1:100 dilution (10  $\mu$ g/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200 (2.5  $\mu$ g/ml). Goat anti rabbit lgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1:1000 (2  $\mu$ g/ml) dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Flow Cytometry (Intracellular) - Anti-RBPJK antibody [EPR13479] (ab180588)

Intracellular Flow Cytometry analysis of HEK-293 (Human embryonic kidney epithelial cell) cells labeling RBPJK with Purified ab180588 at 1/100 dilution (10 µg/ml) (red). Cells were fixed with 4% Paraformaldehyde. A Goat anti rabbit lgG (Alexa Fluor<sup>®</sup> 488, **ab150077**) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal lgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Western blot - Anti-RBPJK antibody [EPR13479] (ab180588)

**All lanes :** Anti-RBPJK antibody [EPR13479] (ab180588) at 0.4 µg/ml (Unpurified)

Lane 1: C6 (Rat glial tumor glial cell) whole cell lysate

Lane 2 : PC-12 (Rat adrenal gland pheochromocytoma) whole cell lysate

Lane 3: NIH/3T3 (Mouse embryonic fibroblast) whole cell lysate

**Lane 4**: Raw264.7 (Mouse abelson murine leukemia virus-induced tumor macrophage) whole cell lysate

Lysates/proteins at 20 µg per lane.

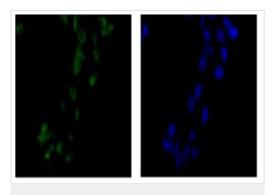
#### Secondary

**All lanes :** Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/50000 dilution

Predicted band size: 56 kDa

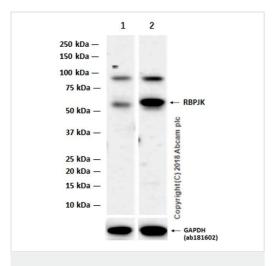
Blocking and diluting buffer: 5% NFDM/TBST.

Exposure time: Lane 1-3: 3 minutes



Immunocytochemistry/ Immunofluorescence - Anti-RBPJK antibody [EPR13479] (ab180588)

Immunofluorescent analysis of 4% paraformaldehyde fixed 293 cells labeling RBPJK with unpurified ab180588 at 1/100 (green). Dapi shown in blue.



Western blot - Anti-RBPJK antibody [EPR13479] (ab180588)

**All lanes :** Anti-RBPJK antibody [EPR13479] (ab180588) at 1/1000 dilution (Unpurified)

**Lane 1 :** MCF-7 (Human breast adenocarcinoma epithelial cell) whole cell lysate 20ug prepared using RIPA lysis method

Lane 2: MCF-7 (Human breast adenocarcinoma epithelial cell) whole cell lysate 20ug prepared using 1% SDS hot lysis method

Lysates/proteins at 20 µg per lane.

## Secondary

**All lanes :** Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated at 1/20000 dilution

Predicted band size: 56 kDa Observed band size: 60 kDa

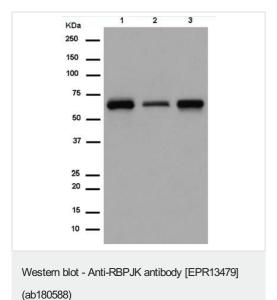
Exposure time: 3 minutes

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

Extra band at: 90kDa

We are unsure as to the identity of this extra band.

For Lysate preparation protocol, please refer to the protocol book in the protocol section and/or **here (downloadable copy)**.



**All lanes :** Anti-RBPJK antibody [EPR13479] (ab180588) at 1/2000 dilution (Unpurified)

Lane 1 : 293 cell line lysate

Lane 2 : MCF7 cell line lysate

Lane 3 : HeLa cell line lysate

#### Secondary

All lanes: Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated at

1/1000 dilution

**Predicted band size:** 56 kDa **Observed band size:** 60 kDa



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