

Product datasheet

Anti-Interferon alpha/beta receptor 1 antibody [EP899Y] ab45172

KO VALIDATED Recombinant RabMAb[®]

★★★★☆ 2 Abreviews 19 References 5 Images

Overview

Product name	Anti-Interferon alpha/beta receptor 1 antibody [EP899Y]
Description	Rabbit monoclonal [EP899Y] to Interferon alpha/beta receptor 1
Host species	Rabbit
Specificity	This antibody is specific for the 90kda form and the full-length form of Interferon alpha/beta receptor 1 protein.
Tested applications	Suitable for: WB, Flow Cyt, IP Unsuitable for: IHC-P
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide within Human Interferon alpha/beta receptor 1 aa 500-600 (C terminal). The exact sequence is proprietary.
Positive control	WB: HeLa and K562 cell lysates. Flow cyt: K562 cells. IP: K-562 cell lysate
General notes	<p>We recommend ab124764 as a better alternative to ab45172.</p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™</p>

guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7.20 Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant
Purity	Tissue culture supernatant
Clonality	Monoclonal
Clone number	EP899Y
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab45172** 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	★★★★☆	1/1000 - 1/10000. Detects a band of approximately 90,130 kDa (predicted molecular weight: 64 kDa). Due to extensive glycosylation of the mature molecule; the 90 kDa species is a minor incompletely processed species.
Flow Cyt	★★★★☆	1/30. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
IP		1/50.

Application notes Is unsuitable for IHC-P.

Target

Function Associates with IFNAR2 to form the type I interferon receptor. Receptor for interferons alpha and

beta. Binding to type I IFNs triggers tyrosine phosphorylation of a number of proteins including JAKs, TYK2, STAT proteins and IFNR alpha- and beta-subunits themselves.

Tissue specificity

IFN receptors are present in all tissues and even on the surface of most IFN-resistant cells. Isoform 1, isoform 2 and isoform 3 are expressed in the IFN-alpha sensitive myeloma cell line U266S. Isoform 2 and isoform 3 are expressed in the IFN-alpha resistant myeloma cell line U266R. Isoform 1 is not expressed in IFN-alpha resistant myeloma cell line U266R.

Sequence similarities

Belongs to the type II cytokine receptor family.
Contains 3 fibronectin type-III domains.

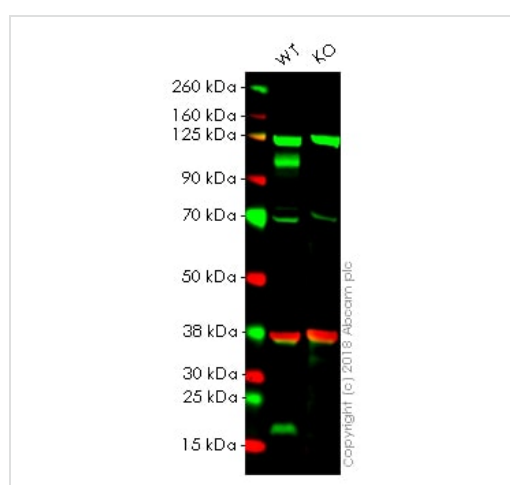
Post-translational modifications

Phosphorylated on tyrosine residues by TYK2 tyrosine kinase.

Cellular localization

Membrane.

Images



Western blot - Anti-Interferon alpha/beta receptor 1 antibody [EP899Y] (ab45172)

All lanes : Anti-Interferon alpha/beta receptor 1 antibody [EP899Y] (ab45172) at 1/1000 dilution

Lane 1 : Wild-type (HeLa) whole cell lysate

Lane 2 : IFNAR1 (Interferon Receptor alpha) knockout (HeLa) whole cell lysate

Lysates/proteins at 20 µg per lane.

Predicted band size: 64 kDa

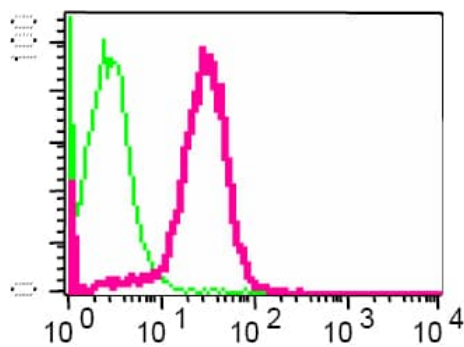
Lanes 1 - 2: Merged signal (red and green). Green - ab45172 observed at 64 kDa. Red - loading control, ab8245, observed at 37 kDa.

ab45172 was shown to recognize Interferon alpha/beta receptor 1 in wild-type WT (HeLa) cells as signal was lost at the expected MW in IFNAR1 (Interferon Receptor alpha) knockout cells. Additional cross-reactive bands were observed in the wild-type and knockout cells. Wild-type and IFNAR1 (Interferon Receptor alpha) knockout samples were subjected to SDS-PAGE. Ab45172 and ab8245 (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/10000 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 1/10000 dilution for 1 hour at room temperature before imaging.



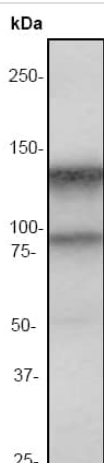
Immunoprecipitation - Anti-Interferon alpha/beta receptor 1 antibody [EP899Y] (ab45172)

Purified ab45172 at 1/50 dilution (2µg) immunoprecipitating Interferon alpha/beta receptor 1 in K-562 whole cell lysate.
 Lane 1 (input): K-562 (Human chronic myelogenous leukemia lymphoblast) whole cell lysate 10µg
 Lane 2 (+): ab45172 + K-562 whole cell lysate.
 Lane 3 (-): Rabbit monoclonal IgG ([ab172730](#)) instead of ab45172 in K-562 whole cell lysate.
 VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)) (1/1000 dilution) was used for Western blotting.
 Blocking Buffer and concentration: 5% NFDm/TBST.
 Diluting buffer and concentration: 5% NFDm/TBST.
 Observed band size: 130 kDa



Flow Cytometry - Anti-Interferon alpha/beta receptor 1 antibody [EP899Y] (ab45172)

Flow cytometric analysis of permeabilized K562 cells using ab45172 at a 1/30 dilution (red) or a rabbit IgG (negative) (green).



Western blot - Anti-Interferon alpha/beta receptor 1 antibody [EP899Y] (ab45172)

Anti-Interferon alpha/beta receptor 1 antibody [EP899Y] (ab45172) at 1/20000 dilution + K562 cell lysate at 10 µg

Secondary


Goat anti rabbit HRP labelled. at 1/2000 dilution

Predicted band size: 64 kDa

Observed band size: 130,90 kDa

[why is the actual band size different from the predicted?](#)

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

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[EP899Y] (ab45172)

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

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