Product datasheet

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

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.


General notes: We recommend ab124764 as a better alternative to ab45172.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

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.

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, 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.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>WB</td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>Flow Cyt</td>
<td>1/30. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.</td>
<td></td>
</tr>
<tr>
<td>IP</td>
<td>1/50.</td>
<td></td>
</tr>
</tbody>
</table>

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.
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.
Flow cytometry 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) 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?

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