abcam

ab326933

Anti-Interferon lambda-2 antibody [EPR30981-15]

Anti-IFNL2 recombinant rabbit monoclonal antibody specifically recognizes mouse IFNL2 (Interferon Lambda 2) with no detectable cross-reactivity to the closely related IFNL3 cytokine, enabling confident interrogation of IFNL2-specific biology. Validated for Intracellular flow cytometry (Flow Cyt Intra), Western blot (WB), immunohistochemistry (IHC-P) and immunocytochemistry/immunofluorescence (ICC/IF), this antibody is ideal for studying type III interferon signaling, antiviral immune responses, mucosal immunity and cytokine-mediated immune regulation.

Recombinant | RabMAb | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR30981-15
Purification technique	Affinity purification Protein A
Specificity	This antibody detects transfected levels of mouse IFNL2 and does not cross-react with mouse IFNL3.
Concentration	0.483 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Transfected cell lysate - Mouse
Dilution info	1/1000
Notes	-

Predicted

Species	Mouse
Dilution info	-
Notes	-

Not recommended

Species	Transfected cell line - Mouse
Dilution info	-
Notes	-

IHC-P

Tested

Species	Transfected cell line - Mouse
Dilution info	1/500
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Predicted

Species	Mouse
Dilution info	-
Notes	-

Not recommended

Species	Transfected cell lysate - Mouse
Dilution info	-

Notes	-

ICC/IF

Tested

Species	Transfected cell line - Mouse
Dilution info	1/500
Notes	-

Predicted

Species	Mouse
Dilution info	-
Notes	-

Not recommended

Species	Transfected cell lysate - Mouse
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Transfected cell line - Mouse
Dilution info	1/5000
Notes	-

Predicted

Species	Mouse
Dilution info	-
Notes	-

Not recommended

Species	Transfected cell lysate - Mouse
Dilution info	-
Notes	-

Target data

See full target information Ifnl2

Function	Cytokine with antiviral, antitumour and immunomodulatory activities. Plays a critical role in the antiviral host defense, predominantly in the epithelial tissues. Acts as a ligand for the heterodimeric class II cytokine receptor composed of IL10RB and IFNLR1, and receptor engagement leads to the activation of the JAK/STAT signaling pathway resulting in the expression of IFN-stimulated genes (ISG), which mediate the antiviral state. Has a restricted receptor distribution and therefore restricted targets: is primarily active in epithelial cells and this cell type-selective action is because of the epithelial cell-specific expression of its receptor IFNLR1. Seems not to be essential for early virus-activated host defense in vaginal infection, but plays an important role in Toll-like receptor (TLR)-induced antiviral defense. Plays a significant role in the antiviral immune defense in the intestinal epithelium. Exerts an immunomodulatory effect by up-regulating MHC class I antigen expression.

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
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 batch production

For more information, read more on recombinant antibodies.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

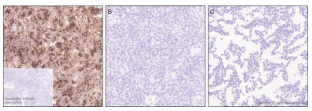
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

4 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Interferon lambda-2 antibody [EPR30981-15] (ab326933)

Interferon lambda-2 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Interferon lambda-2 antibody

Immunohistochemical analysis of paraffin-embedded (A) HEK-293T (human embryonic kidney epithelial cell) transfected with a mouse IFNL2 expression vector containing a his tag (B) HEK-293T transfected with a mouse IFNL3 expression vector containing a his tag (C) HEK-293T transfected

with empty vector containing a his tag tissue labeling Interferon lambda-2 with ab326933 at 1/500 (0.974 µg/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

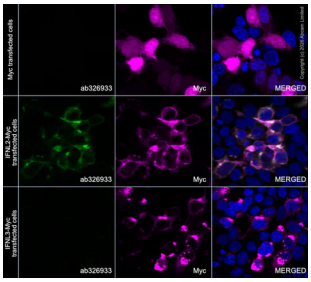
Positive staining on (A) HEK-293T transfected with a mouse IFNL2 expression vector containing a his tag, no staining on (B) HEK-293T transfected with a mouse IFNL3 expression vector containing a his tag and (C) HEK-293T transfected with empty vector containing a his tag. The primary antibody was incubated for 30 mins at room temperature.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins



Immunocytochemistry/ Immunofluorescence - Anti-Interferon lambda-2 antibody [EPR30981-15] (ab326933)

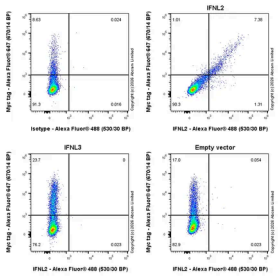
Interferon lambda-2 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Interferon lambda-2 antibody

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized 293T cells transfected with empty vector containing a myc-His-tag®. 293T cells transfected with a mouse IFNL2 expression vector containing a myc-His-tag®. 293T cells transfected with a mouse IFNL3 expression vector containing a myc-His-tag®. cells labelling Interferon lambda-2 with ab326933 at 1/500 (0.974 µg/ml) dilution , followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 dilution (Green).

Confocal image showing cytoplasmic staining in 293T cells transfected with a mouse IFNL2 expression vector containing a myc-His-tag® (shown in green). The counterstain was observed in magenta. Nuclear DNA was labelled with DAPI (shown in blue). Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

ab223894 Anti-Myc tag mouse monoclonal antibody (Alexa Fluor® 594) was used to counterstain tubulin at 1/100 dilution (Magenta). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution.



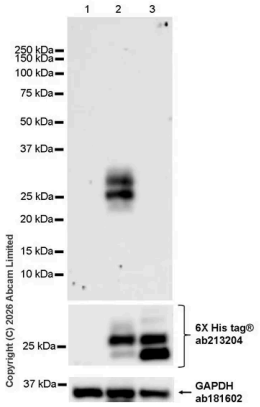
Flow Cytometry (Intracellular) - Anti-Interferon lambda-2 antibody [EPR30981-15] (ab326933)

Interferon lambda-2 Flow Cytometry (Intracellular) staining using rabbit Anti-Interferon lambda-2 antibody

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized 293T cells (human embryonic kidney epithelial cell) transfected with a mouse IFNL2 expression vector containing a Myc-His-tag® (Upper) 293T cells transfected with a mouse IFNL3 expression vector containing a Myc-His-tag® (Lower left) 293T cells transfected with an empty expression vector containing a myc-His-tag® (Lower right) cells labelling Interferon lambda-2 with ab326933 at 1/5000 dilution (0.01ug) / Upper right and Lower compared with a Rabbit monoclonal IgG (ab172730) / Left isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody).

Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody.

Cells were co-stained with Myc tag conjugated to Alexa Fluor®647.



Western blot - Anti-Interferon lambda-2 antibody [EPR30981-15] (ab326933)

Interferon lambda-2 Western blot staining using rabbit Anti-Interferon lambda-2 antibody

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

This antibody does not cross-react with mouse IFNL3.

In Western blot, Anti-GAPDH antibody [EPR16891] - Loading Control (ab181602) (1:200000) (36KDa);Anti-6X His tag® antibody [EPR20547] - ChIP Grade (ab213204) (1:5000)(22-30KDa).

All lanes:
Western blot - Anti-Interferon lambda-2 antibody [EPR30981-15] (ab326933) at 1/1000 dilution

Lane 1:
293T cells transfected with an empty vector containing a his-tag, whole cell lysate at 20 µg

Lane 2:
293T cells transfected with a mouse IFNL2 expression vector containing a his-tag, whole cell lysate at 20 µg

Lane 3:
293T cells transfected with a mouse IFNL3 expression vector containing a his-tag, whole cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Observed band size: 22-30 kDa, 36 kDa

Exposure time: 48s

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.