abcam

ab244788

Anti-IL-29 antibody [EPR19773-96] - BSA and Azide free (Capture)

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR19773-96
Purification technique	Affinity purification Protein A
Specificity	This antibody detects transfected levels of human IL-29. This antibody does not cross-react with recombinant human IFNL2 (IL-28A) and IFNL3 (IL-28B) in ELISA.
Concentration	1.05 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

sELISA

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Transfected cell lysate - Human, Transfected cell line - Human
Dilution info	-
Notes	-

WB

Tested

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

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Transfected cell line - Human
Dilution info	-
Notes	-

IHC-P

Tested

Species	Transfected cell line - Human
Dilution info	1/5000

Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Transfected cell lysate - Human
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Transfected cell line - Human
Dilution info	1/1000
Notes	-

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Transfected cell lysate - Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Transfected cell line - Human
Dilution info	1/50000
Notes	-

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Transfected cell lysate - Human
Dilution info	-
Notes	-

FuncS (Neut/Block)

Tested

Species	Human
Dilution info	-
Notes	-

Not recommended

Species	Transfected cell lysate - Human, Transfected cell line - Human
Dilution info	-
Notes	-

Target data

See full target information IFNL1

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. Exerts an immunomodulatory effect by up-regulating MHC class I antigen expression.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C

Notes

ab244788 is a BSA and Azide Free antibody supplied in an unconjugated format and it is suitable for sandwich ELISAs to quantify Human IL-29. The recommended pair for sandwich ELISA is:
Capture: ab244788, Human IL-29 Capture Antibody (unconjugated)
Detector: ab245061, Human IL-29 Detector Antibody (unconjugated)
The reference range value is 31.3 - 3200 pg/ml.

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.

Conjugation ready
Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Sandwich ELISA
The recommended antibody orientation is based on internal optimization for ELISA-based assays. Antibody orientation is assay dependent and needs to be optimized for each assay type. Please note that the range provided for this antibody is only an estimation based on the performance of the product using the recommended antibody pair. Performance of the antibody pair will depend on the specific characteristics of your assay. We guarantee the product works in sandwich ELISA, but we do not guarantee the sensitivity or dynamic range of the antibody in your assay.

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

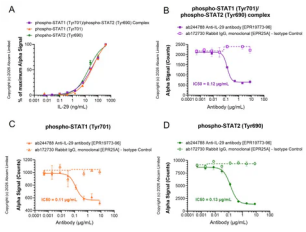
We do not recommend this combination. It is not covered by our product promise.

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.

6 product images



Functional Studies (Neut/Block) - Anti-IL-29 antibody [EPR19773-96] - BSA and Azide free (Capture) (ab244788)

Modulation of STAT1/2 phosphorylation in A431 cells following stimulation with IL-29 (ab200263), in the presence of either an anti-IL-29 antibody (ab244788) or an IgG isotype control (ab199376) using AlphaLISA SureFire assay technology.
(A) Dose–response curves of A431 cells exposed to increasing concentrations of IL-29 for 30 minutes.

(B) Analysis of phospho-STAT1 (Tyr701)/phospho-STAT2 (Tyr690) complex induced by 50ng/ml human IL-29 following treatment with anti-IL-29 antibody (ab244788; filled squares, solid line) or

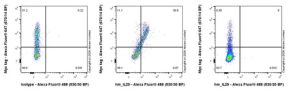
IgG isotype control (ab199376; open squares, dotted line) across a range of concentrations. The IC_{50} for inhibition of phospho-STAT1 (Tyr701)/phospho-STAT2 (Tyr690) complex is 0.12 µg/mL.

(C) Analysis of phospho-STAT1 (Tyr701) induced by 50ng/ml human IL-29 following treatment with anti-IL-29 antibody (ab200263; filled triangles, solid line) or IgG isotype control (ab199376; open triangles, dotted line) across a range of concentrations. The IC_{50} for inhibition of phospho-STAT1 (Tyr701) is 0.11 µg/mL.

(D) Analysis of phospho-STAT2 (Tyr690) induced by 50ng/ml human IL-29 following treatment with anti-IL-29 antibody (ab200263; filled circles, solid line) or IgG isotype control (ab199376; open circles, dotted line) across a range of concentrations. The IC_{50} for inhibition of phospho-STAT2 (Tyr690) is 0.13 µg/mL.

A431 cells were seeded at 4×10^4 cells per well in 96‐well plates. Anti‐IL‐29 antibody or isotype control at the indicated concentrations was pre‐incubated with 50 ng/mL IL‐29 for 10 minutes before being added to the cells, followed by a 30‐minute stimulation. Levels of phospho‐STAT1 (Tyr701), phospho‐STAT2 (Tyr690), and the phospho‐STAT1 (Tyr701)/phospho‐STAT2 (Tyr690) complex were quantified using SureFire® Ultra™ assays.

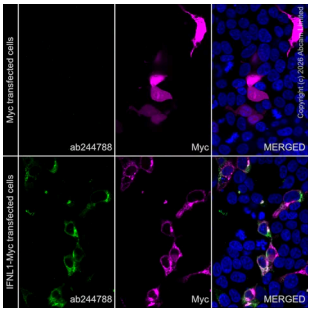
The data were kindly generated by the TGR Biosciences team, an abcam company SureFire® is a registered trademark of TGR BioSciences Pty Ltd, Australia.



Flow Cytometry (Intracellular) - Anti-IL-29 antibody [EPR19773-96] - BSA and Azide free (Capture) (ab244788)

IL-29 Flow Cytometry (Intracellular) staining using rabbit Anti-IL-29 antibody

Flow cytometry (intracellular) analysis of transfected 293T cells. Cells were fixed with 4% PFA and permeabilised with 90% methanol before staining for IL-29 in 293T cells transfected with a human IFNL1 expression vector containing a myc-His-tag® (Middle) using ab244788 at 1/50000 dilution (0.001ug). Staining was compared with 293T cells transfected with an empty expression vector containing a myc-His-tag® (Right) and with an isotype control, Rabbit monoclonal IgG (ab172730) (Left). Goat anti‐rabbit IgG (Alexa Fluor® 488, ab150081) was used as the secondary antibody at a 1/5000 dilution. Cells were co-stained with Myc tag conjugated to Alexa Fluor® 647.

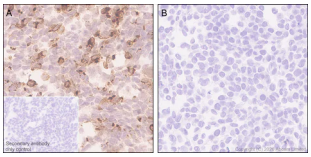


Immunocytochemistry/ Immunofluorescence - Anti-IL-29 antibody [EPR19773-96] - BSA and Azide free (Capture) (ab244788)

IL-29 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-IL-29 antibody

Immunofluorescent analysis of 4% Paraformaldehyde fixed 0.1% Triton X-100 permeabilized HEK-293T cells transfected with a human IL-29/IFNL1 protein expression vector containing a myc-His-tag® labelling IL-29 with ab244788 at 1/1000 (1.043 µg/ml) dilution. ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed was used as secondary at 1/1000 (2µg/ml) dilution. ab223894 Anti-Myc tag mouse monoclonal antibody (Alexa Fluor® 594) was used as a counterstain at 1/200 dilution (2.5µg/ml). Confocal image showing positive staining in 293T cells (shown in green) transfected with a human IFNL1 protein expression vector containing a myc-His-tag®. The counterstain was observed in magenta. Nuclear DNA was labelled with DAPI (shown in blue). **Negative control:** HEK-293T cells (human embryonic kidney epithelial cells) transfected with an empty expression vector containing a myc-His-tag®.

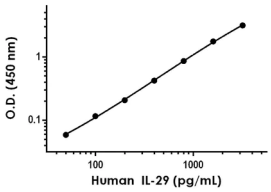
Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IL-29 antibody [EPR19773-96] - BSA and Azide free (Capture) (ab244788)

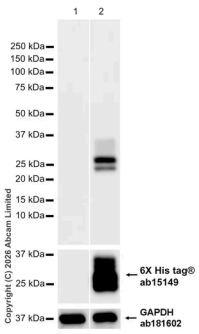
IL-29 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-IL-29 antibody

Immunohistochemical analysis of HEK-293T (human embryonic kidney epithelial cell) transfected with a human IFNL1 expression vector containing a myc-His-tag labeling IL-29 with ab244788 at 1/5000 (0.209 µg/ml) dilution. Positive staining on (A) HEK-293T transfected with a human IFNL1 expression vector containing a myc-His-tag, no staining on (B) HEK-293T transfected with empty vector containing a myc-His-tag. The primary antibody was incubated for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Sandwich ELISA - Anti-IL-29 antibody [EPR19773-96] - BSA and Azide free (Capture) (ab244788)

Representative standard curve from corresponding SimpleStep ELISA® Kit (ab236715).



Western blot - Anti-IL-29 antibody [EPR19773-96] - BSA and Azide free (Capture) (ab244788)

IL-29 Western blot staining using rabbit Anti-IL-29 antibody

Blocking and diluting buffer and concentration: 5% NFDM/TBST.
In Western blot, Anti-GAPDH antibody [EPR16891] - Loading Control (ab181602) staining at 1/200000 dilution.

In Western blot, 6X His tag® antibody [AD1.1.10]- Total Protein Control (ab15149) staining at 1/1000 dilution.

All lanes:
Western blot - Anti-IL-29 antibody [EPR19773-96] - BSA and Azide free (Capture) (ab244788) 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 human IFNL1 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: 25 kDa, 36 kDa

Exposure time: 15s

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