abcam

ab187059

Anti-IL-17F antibody [EPR17830-169]

Recombinant | RabMAb

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	EPR17830-169
Purification technique	Affinity purification Protein A
Concentration	0.619 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Tested

Species	Mouse
Dilution info	1/30
Notes	-

WB

Tested

Species	Mouse
Dilution info	1/1000
Notes	-

Flow Cyt (Intra)

Tested

Species	Mouse
Dilution info	1/60
Notes	-

Target data

See full target information Il17f

Function

Effector cytokine of innate and adaptive immune system involved in antimicrobial host defense and maintenance of tissue integrity (PubMed:18025225, PubMed:19144317, PubMed:23255360). IL17A-IL17F signals via IL17RA-IL17RC heterodimeric receptor complex, triggering homotypic interaction of IL17RA and IL17RC chains with TRAF3IP2 adapter through SEFIR domains. This leads to downstream TRAF6-mediated activation of NF-kappa-B and MAPkinase pathways ultimately resulting in transcriptional activation of cytokines, chemokines, antimicrobial peptides and matrix metalloproteinases, with potential strong immune inflammation (PubMed:15477493, PubMed:17911633, PubMed:18025225). IL17A-IL17F is primarily involved in host defense against extracellular bacteria and fungi by inducing neutrophilic inflammation (PubMed:18025225, PubMed:23255360). As signature effector cytokine of T-helper 17 cells (Th17), primarily induces neutrophil activation and recruitment at infection and inflammatory sites (PubMed:18025225). Stimulates the production of antimicrobial beta-defensins DEFB1, DEFB103A, and DEFB104A by mucosal epithelial cells, limiting the entry of microbes through the epithelial barriers (PubMed:19144317). IL17F homodimer can signal via IL17RC homodimeric receptor complex, triggering downstream activation of TRAF6 and NF-kappa-B signaling pathway (PubMed:28813677). Via IL17RC induces transcriptional activation of IL33, a potent cytokine that stimulates group 2 innate lymphoid cells and adaptive T-helper 2 cells involved in pulmonary allergic response to fungi (PubMed:28813677). Likely via IL17RC, promotes sympathetic innervation of peripheral organs by coordinating the communication between gamma-delta T cells and parenchymal cells. Stimulates sympathetic innervation of thermogenic adipose tissue by driving TGFB1 expression (PubMed:32076265). Regulates the composition of intestinal microbiota and immune tolerance by inducing antimicrobial proteins that

specifically control the growth of commensal Firmicutes and Bacteroidetes (PubMed:29915298).

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.

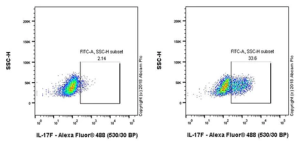
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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.

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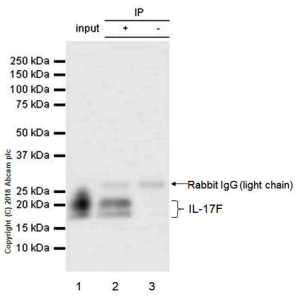
4 product images



Flow Cytometry (Intracellular) - Anti-IL-17F antibody [EPR17830-169] (ab187059)

IL-17F Flow Cytometry (Intracellular) staining using rabbit Anti-IL-17F antibody

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed 90% methanol-fixed EL4 (mouse lymphoma T lymphocyte) treated with 50ng/ml Phorbol-12-myristate-13-acetate (PMA) and 500ng/ml Ionomycin calcium salt for 24 hours, and 500ng/ml Brefeldin A (BFA) was added for the last 20 hours (Right) / Untreated control (Left) labeling IL17F with ab187059 at 1/60 dilution. Secondary antibody used Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) at a 1/2000 dilution.



Immunoprecipitation - Anti-IL-17F antibody [EPR17830-169] (ab187059)

IL17F was immunoprecipitated from 0.35 mg of EL4 (mouse lymphoma T lymphocyte) treated with 50 ng/ml phorbol-12-myristate-13-acetate (PMA) and 500 ng/ml ionomycin calcium salt for 24 hours, and 500ng/ml Brefeldin A (BFA) was added for the last 20 hours whole cell lysate with ab187059 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab187059 at 1/1,000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366) was used for detection at 1/5,000 dilution.

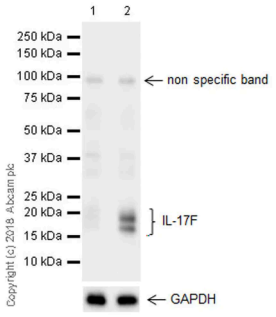
Lane 1: EL4 (mouse lymphoma T lymphocyte) treated with 50 ng/ml phorbol-12-myristate-13-acetate (PMA) and 500 ng/ml ionomycin calcium salt for 24 hours, and 500ng/ml Brefeldin A (BFA) was added for the last 20 hours whole cell lysate 10 µg (Input).
Lane 2: EL4 treated with 50 ng/ml phorbol-12-myristate-13-acetate (PMA) and 500 ng/ml ionomycin calcium salt for 24 hours, and 500 ng/ml Brefeldin A (BFA) was added for the last 20 hours whole cell lysate.
Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab187059 in EL4 treated with 50 ng/ml phorbol-12-myristate-13-acetate (PMA) and 500 ng/ml ionomycin calcium salt for 24 hours, and 500 ng/ml Brefeldin A (BFA) was added for the last 20 hours whole cell lysate.
Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: 10 seconds

All lanes:

Immunoprecipitation - Anti-IL-17F antibody [EPR17830-169] (ab187059)

Predicted band size: 18 kDa



Western blot - Anti-IL-17F antibody [EPR17830-169] (ab187059)

IL-17F Western blot staining using rabbit Anti-IL-17F antibody

Blocking/Diluting buffer: 5% NFDM/TBST
The molecular mass observed is consistent with the literature (PMID 2212322).

Expression of IL-17F in EL4 cells is increased by PMA and Ionomycin treatment (PMID 28382171).

All lanes:
Western blot - Anti-IL-17F antibody [EPR17830-169] (ab187059) at 1/1000 dilution

Lane 1:
Untreated EL4 (mouse lymphoma T lymphocyte), whole cell lysate at 10 µg

Lane 2:
EL4 treated with 50 ng/ml phorbol-12-myristate-13-acetate (PMA) and 500 ng/ml ionomycin calcium salt for 24 hours, and 500 ng/ml Brefeldin A (BFA) was added to the treated cells last 20 hours, whole cell lysate at 10 µg

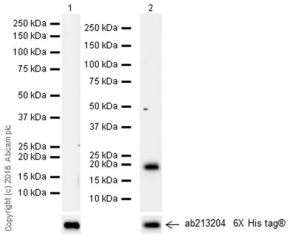
Secondary

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

Predicted band size: 18 kDa

Observed band size: 16-18 kDa

Exposure time: 48s



Western blot - Anti-IL-17F antibody [EPR17830-169] (ab187059)

Blocking/Dilution buffer: 5% NFDM/TBST
All lanes:
Western blot - Anti-IL-17F antibody [EPR17830-169] (ab187059) at 1/5000 dilution

Lane 1:
Mouse IL17A recombinant protein (aa26-158) 10 ng

Lane 2:
Mouse IL17F recombinant protein (aa29-161) 10 ng

Secondary

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

Predicted band size: 18 kDa

Observed band size: 18 kDa

Exposure time: 26s

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