abcam

ab251467

Anti-IL-16 antibody [EPR19988] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR19988
Purification technique	Affinity purification Protein A
Concentration	1.061 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	-

IP

Tested

Species	Human
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	Observed Mass of target (kDa): 80, 75-40.

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

IHC-P

Tested

Species	Human
Dilution info	-
Notes	-

Target data

See full target information IL16

Function	Interleukin-16 stimulates a migratory response in CD4+ lymphocytes, monocytes, and eosinophils. Primes CD4+ T-cells for IL-2 and IL-15 responsiveness. Also induces T-lymphocyte expression of interleukin 2 receptor. Ligand for CD4. Isoform

1. May act as a scaffolding protein that anchors ion channels in the membrane. Isoform 3 is involved in cell cycle progression in T-cells. Appears to be involved in transcriptional regulation of SKP2 and is probably part of a transcriptional repression complex on the core promoter of the SKP2 gene. May act as a scaffold for GABPB1 (the DNA-binding subunit the GABP transcription factor complex) and HDAC3 thus maintaining transcriptional repression and blocking cell cycle progression in resting T-cells.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab251467 is the carrier-free version of ab207181.

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.

Compatibility

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

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.

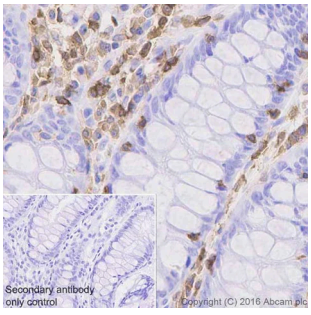
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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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7 product images



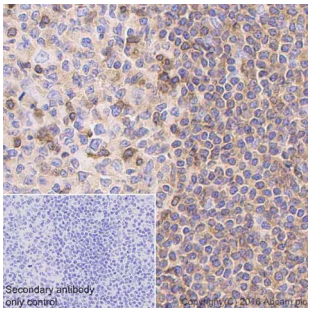
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IL-16 antibody [EPR19988] - BSA and Azide free (ab251467)

IL-16 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-IL-16 antibody

This data was developed using ab207181, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded human colon tissue labeling IL-16 with ab207181 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Cytoplasmic staining on stromal cells of human colon is observed [PMID: 11709514]. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

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



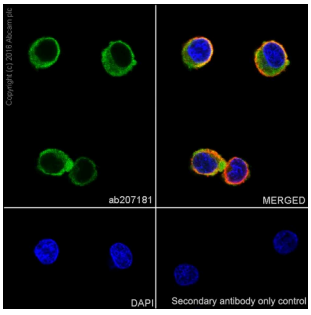
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IL-16 antibody [EPR19988] - BSA and Azide free (ab251467)

IL-16 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-IL-16 antibody

This data was developed using ab207181, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded human tonsil tissue labeling IL-16 with ab207181 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Cytoplasmic staining on human tonsil is observed [PMID: 10946273]. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

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



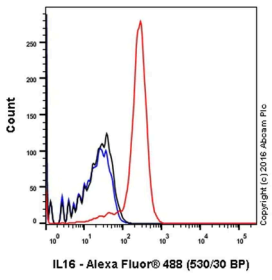
Immunocytochemistry/ Immunofluorescence - Anti-IL-16 antibody [EPR19988] - BSA and Azide free (ab251467)

IL-16 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-IL-16 antibody

This data was developed using ab207181, the same antibody clone in a different buffer formulation.
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized H9 (Human cutaneous T lymphocyte lymphoma cell line) cells labeling IL-16 with ab207181 at 1/100 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green). Confocal image showing cytoplasmic staining on H9 cell line.

The nuclear counter stain is DAPI (blue). Tubulin is detected with ab195889 (Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594)) at 1/200 dilution (red).

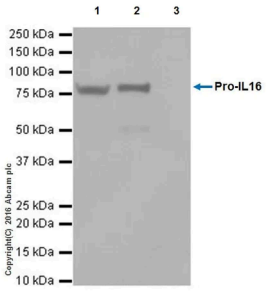
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat anti-rabbit IgG (Alexa Fluor® 488) (ab150077) at 1/1000 dilution.



Flow Cytometry (Intracellular) - Anti-IL-16 antibody [EPR19988] - BSA and Azide free (ab251467)

IL-16 Flow Cytometry (Intracellular) staining using rabbit Anti-IL-16 antibody

This data was developed using ab207181, the same antibody clone in a different buffer formulation.
Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed H9 (Human cutaneous T lymphocyte lymphoma cell line) cells labeling IL-16 with ab207181 at 1/600 dilution (red) compared with a rabbit monoclonal IgG isotype control (ab172730; black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody; blue). Goat anti rabbit IgG (Alexa Fluor® 488) at 1/2000 dilution was used as the secondary antibody.



Immunoprecipitation - Anti-IL-16 antibody [EPR19988] - BSA and Azide free (ab251467)

This data was developed using ab207181, the same antibody clone in a different buffer formulation.
IL-16 was immunoprecipitated from 0.35 mg of H9 (Human cutaneous T lymphocyte lymphoma cell line) whole cell lysate with ab207181 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab207181 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/10000 dilution.

Lane 1: H9 whole cell lysate, 10 µg (Input).

Lane 2: ab207181 IP in H9 whole cell lysate.

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab207181 in H9 whole cell lysate.

Blocking and dilution buffer: 5% NFDM/TBST.

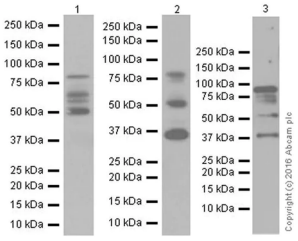
Exposure time: 10 seconds.

Note: The band at around 50kDa is a cleaved form of IL-16.

All lanes:
Immunoprecipitation - Anti-IL-16 antibody [EPR19988] (ab207181)

Predicted band size: 142 kDa

Observed band size: 37-80 kDa



Western blot - Anti-IL-16 antibody [EPR19988] - BSA and Azide free (ab251467)

This data was developed using ab207181, the same antibody clone in a different buffer formulation.
Blocking and dilution buffer: 5% NFDM/TBST.

Exposure times: Lane 1: 5 seconds, Lane 2: 15 seconds, Lane 3: 3 minutes.

The band at 80 kDa is pro-IL-16 and the bands at 40-75 kDa are cleaved fragments. This is consistent with what has been described in the literature (PMID: 15187155; 9144227; 9743378; 14734747).

All lanes:
Western blot - Anti-IL-16 antibody [EPR19988] (ab207181) at 1/1000 dilution

Lane 1:
Human thymus tissue lysate at 10 µg

Lane 2:
Human spleen tissue lysate at 10 µg

Lane 3:
Human tonsil tissue lysate at 20 µg

Secondary

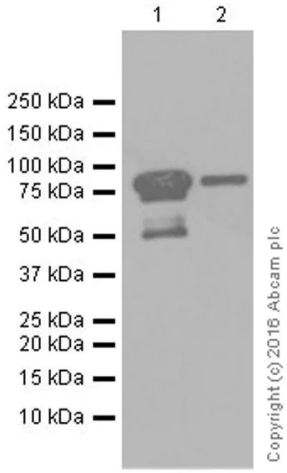
Lanes 1 - 2:
Western blot - VeriBlot for IP Detection Reagent (HRP) (ab131366) at 1/4000 dilution

Lane 3:

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

Predicted band size: 142 kDa

Observed band size: 75-40 kDa, 80 kDa



Western blot - Anti-IL-16 antibody [EPR19988] - BSA and Azide free (ab251467)

IL-16 Western blot staining using rabbit Anti-IL-16 antibody

This data was developed using ab207181, the same antibody clone in a different buffer formulation.
Blocking and dilution buffer: 5% NFDM/TBST.

The band at 80 kDa is pro-IL-16 and the bands at 40-75 kDa are cleaved fragments. This is consistent with what has been described in the literature (PMID: 15187155, 9144227, 9743378, 14734747).

All lanes:
Western blot - Anti-IL-16 antibody [EPR19988] (ab207181) at 1/1000 dilution

Lane 1:
H9 (Human cutaneous T lymphocyte lymphoma cell line) whole cell lysate at 10 µg

Lane 2:
Jurkat (Human T cell leukemia cell line from peripheral blood) 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: 142 kDa

Observed band size: 75-40 kDa, 80 kDa

Exposure time: 3min

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