abcam

Product datasheet

Anti-IL-16 antibody [EPR19988] ab207181

Recombinant RabMAb

4 References 8 Images

Overview

Product name	Anti-IL-16 antibody [EPR19988]
Description	Rabbit monoclonal [EPR19988] to IL-16
Host species	Rabbit
Tested applications	**Suitable for:** WB, IHC-P, ICC/IF, IP, Flow Cyt (Intra)
Species reactivity	**Reacts with:** Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: H9 and Jurkat whole cell lysates; Human thymus, spleen and tonsil lysates. IHC-P: Human tonsil and colon tissues. ICC/IF: H9 cells. Flow Cyt (intra): H9 cells. IP: H9 whole cell lysate.
General notes	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. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR19988
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab207181 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1000. Predicted molecular weight: 67 kDa. **Observed Mass of target (kDa)**: **80, 75-40**
IHC-P		1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		1/100.
IP		1/30.
Flow Cyt (Intra)		1/600.

Target

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.

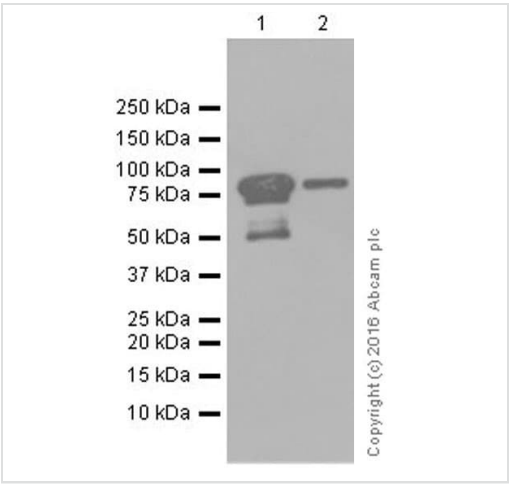
Tissue specificity Isoform 3 is expressed in hemopoietic tissues, such as resting T-cells, but is undetectable during active T cell proliferation.

Sequence similarities Contains 4 PDZ (DHR) domains.

Post-translational modifications Isoform 3 is synthesized as a chemo-attractant inactive precursor in hemopoietic tissues and is proteolytically cleaved by caspase-3 to yield IL-16.

Cellular localization Cytoplasm; Cytoplasm. Nucleus and Secreted.

Images



Western blot - Anti-IL-16 antibody [EPR19988] (ab207181)

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

Lane 1 : H9 (Human cutaneous T lymphocyte lymphoma cell line) whole cell lysate
Lane 2 : Jurkat (Human T cell leukemia cell line from peripheral blood) whole cell lysate

Lysates/proteins at 10 µg per lane.

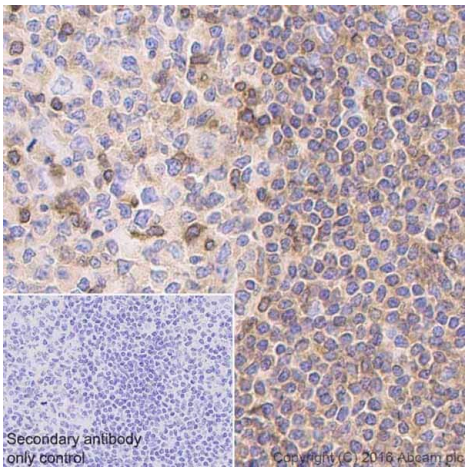
Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Predicted band size: 67 kDa
Observed band size: 75-40,80 kDa

Exposure time: 3 minutes

Blocking/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, PMID: 9144227, PMID: 9743378, PMID: 14734747).

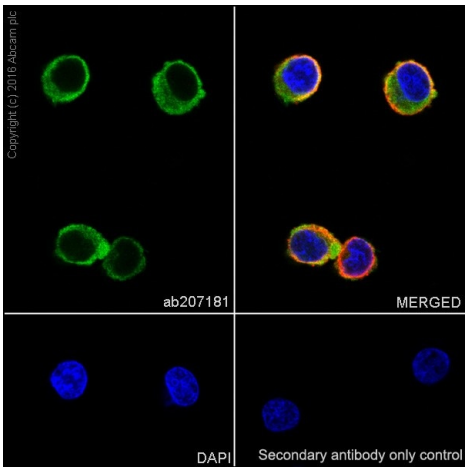


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IL-16 antibody [EPR19988] (ab207181)

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.

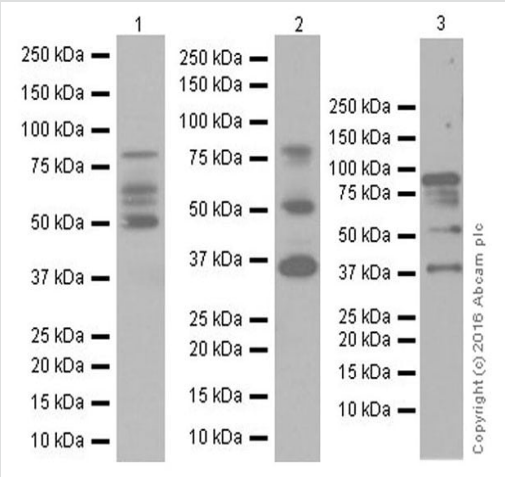


Immunocytochemistry/ Immunofluorescence - Anti-IL-16 antibody [EPR19988] (ab207181)

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.



Western blot - Anti-IL-16 antibody [EPR19988] (ab207181)

All lanes : 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

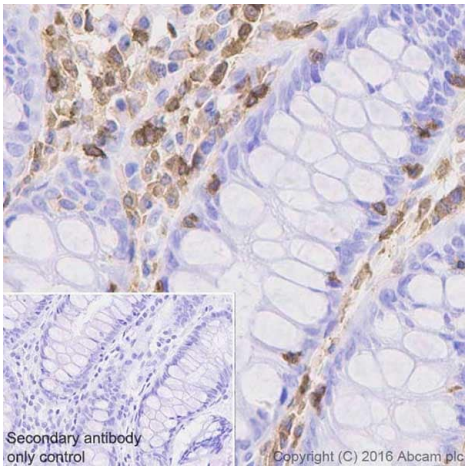
Secondary
Lanes 1-2 : VeriBlot for IP Detection Reagent (HRP) (**ab131366**) at 1/4000 dilution
Lane 3 : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Predicted band size: 67 kDa
Observed band size: 75-40,80 kDa

Blocking/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, PMID: 9144227, PMID: 9743378, PMID: 14734747).

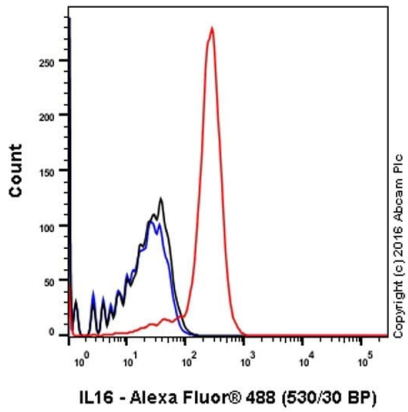


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IL-16 antibody [EPR19988] (ab207181)

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.

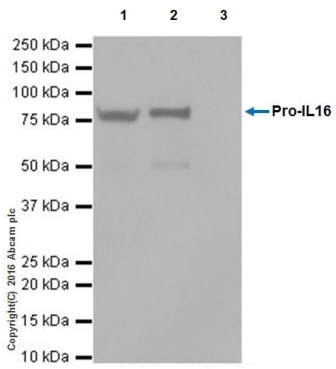
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.

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



Flow Cytometry (Intracellular) - Anti-IL-16 antibody [EPR19988] (ab207181)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed H9 (Human cutaneous T lymphocyte lymphoma cell line) cells labeling IL-16with 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 Fluorr® 488) at 1/2000 dilution was used as the secondary antibody.



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

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).

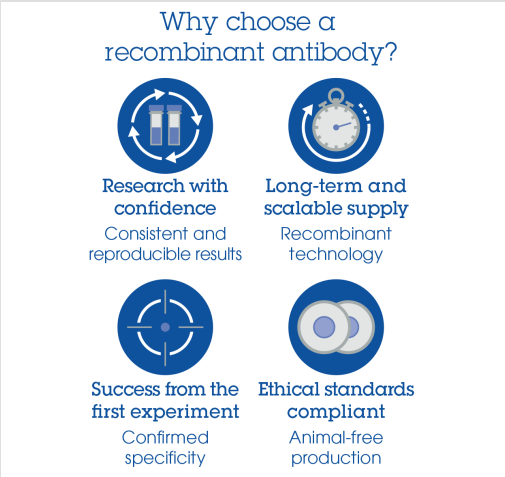
Lane 2: ab207181 IP in H9 whole cell lysate.

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

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

Exposure time: 10 seconds.

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



Anti-IL-16 antibody [EPR19988] (ab207181)

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