abcam

Product datasheet

Anti-IL-33 antibody [EPR17831] ab187060

リコンビナント RabMAb

★★★★★ 2 Abreviews 11 References 画像数 8

製品の概要

製品名	Anti-IL-33 antibody [EPR17831]
製品の詳細	Rabbit monoclonal [EPR17831] to IL-33
由来種	Rabbit
アプリケーション	**適用あり:** Flow Cyt (Intra), WB, IHC-P, ICC/IF **適用なし:** IP
種交差性	**交差種:** Mouse, Rat
免疫原	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	WB: Rat and mouse lung tissue lysate; RAW 264.7 treated with 50 nM Phorbol-12-myristate-13-acetate (PMA) and 5 ug/ml lipopolysaccharide (LPS) for 24 hours, whole cell lysate. IHC-P: Mouse and rat spleen tissue. ICC/IF: RAW 264.7 treated with 50 nM Phorbol-12-myristate-13-acetate (PMA) and 5 ug/ml lipopolysaccharide (LPS) for 24 hours cells. Flow Cyt (intra): RAW 264.7 cells
特記事項	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**.

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
バッファー	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol, 0.05% BSA
精製度	Protein A purified

ポリ/モノ	モノクローナル
クローン名	EPR17831
アイソタイプ	IgG

アプリケーション

The Abpromise guarantee Abpromise保証は、次のテスト済みアプリケーションにおけるab187060の使用に適用されます

アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
Flow Cyt (Intra)		1/500.
WB		1/1000. Detects a band of approximately 33 kDa (predicted molecular weight: 30 kDa).
IHC-P	★★★★★ (1)	1/2000. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. Antigen retrieval performed using Universal HIER antigen retrieval reagent (10X) (**ab208572**).
ICC/IF	★★★★★ (1)	1/500.

追加情報 Is unsuitable for IP.

ターゲット情報

機能 Cytokine that binds to and signals through the IL1RL1/ST2 receptor which in turn activates NF-kappa-B and MAPK signaling pathways in target cells (PubMed:16286016). Involved in the maturation of Th2 cells inducing the secretion of T-helper type 2-associated cytokines. Also involved in activation of mast cells, basophils, eosinophils and natural killer cells. Acts as a chemoattractant for Th2 cells, and may function as an "alarmin", that amplifies immune responses during tissue injury (PubMed:17853410, PubMed:18836528).
In quiescent endothelia the uncleaved form is constitutively and abundantly expressed, and acts as a chromatin-associated nuclear factor with transcriptional repressor properties, it may sequester nuclear NF-kappaB/RELA, lowering expression of its targets (PubMed:21734074). This form is rapidely lost upon angiogenic or proinflammatory activation (PubMed:18787100).

組織特異性 Expressed at high level in high endothelial venules found in tonsils, Peyer patches and mesenteric lymph nodes. Almost undetectable in placenta.

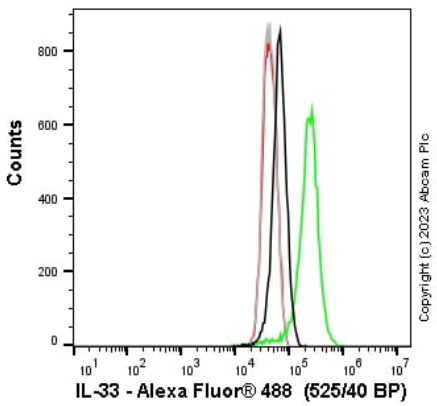
配列類似性 Belongs to the IL-1 family. Highly divergent.

ドメイン The homeodomain-like HTH domain mediates nuclear localization and heterochromatin association.

翻訳後修飾 The full length protein can be released from cells and is able to signal via the IL1RL1/ST2 receptor. However, proteolytic processing by CSTG/cathepsin G and ELANE/neutrophil elastase produces C-terminal peptides that are more active than the unprocessed full length protein. May also be proteolytically processed by calpains (PubMed:19596270). Proteolytic cleavage mediated by apoptotic caspases including CASP3 and CASP7 results in IL33 inactivation (PubMed:19559631). In vitro proteolytic cleavage by CASP1 was reported (PubMed:16286016)

	but could not be confirmed in vivo (PubMed:19465481) suggesting that IL33 is probably not a direct substrate for that caspase.
細胞内局在	Nucleus. Chromosome. Cytoplasmic vesicle, secretory vesicle. Secreted. Associates with heterochromatin and mitotic chromosomes (PubMed:17185418).

画像



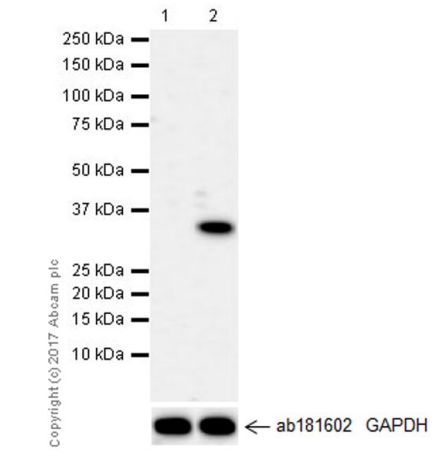
Flow Cytometry (Intracellular) - Anti-IL-33 antibody [EPR17831] (ab187060)

Flow cytometry overlay histogram showing left, Raw264.7 treated with 50nM PMA and 5µg/ml LPS for 24h and right, negative untreated Raw264.7 stained with ab187060 (red line). The cells were fixed with 4% formaldehyde (10 min) and then permeabilised with 0.1% PBS-Triton X-100 for 15 min. The cells were then incubated in 1x PBS containing 10µg/ml anti CD16/CD32 and 10% normal goat serum to block FC receptors and non-specific protein-protein interaction followed by the antibody (ab187060) (1x 10^6 in 100µl at 1.0µg/ml (1/2090)) for 30min at 22°C.

The secondary antibody Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed was incubated at 1/4000 for 30min at 22°C

Isotype control antibody (black line) was Recombinant Rabbit IgG, monoclonal [EPR25A] - Isotype Control used at the same concentration and conditions as the primary antibody. Unlabelled sample (blue line) was also used as a control.

Acquisition of >5000 events were collected using a 50 mW Blue laser (488nm) and 525/40 bandpass filter.



Western blot - Anti-IL-33 antibody [EPR17831] (ab187060)

All lanes : Anti-IL-33 antibody [EPR17831] (ab187060) at 1/1000 dilution

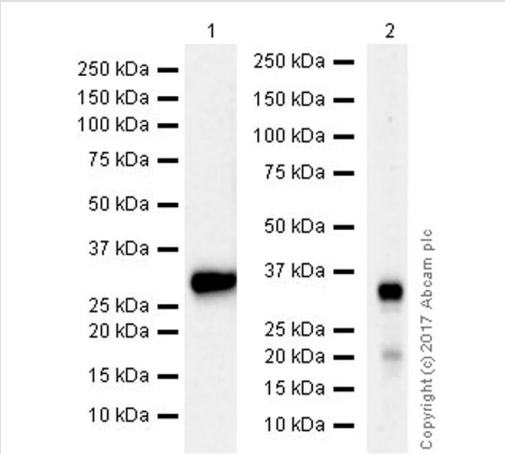
Lane 1 : RAW 264.7 (mouse macrophage cell line transformed with Abelson murine leukemia virus) whole cell lysate
Lane 2 : RAW 264.7 treated with 50 nM Phorbol-12-myristate-13-acetate (PMA) and 5 ug/ml lipopolysaccharide (LPS) for 24 hours, whole cell lysate

Lysates/proteins at 10 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**)

Developed using the ECL technique.

Predicted band size: 30 kDa
Observed band size: 33 kDa



Western blot - Anti-IL-33 antibody [EPR17831] (ab187060)

Blocking/Dilution: 5% NFDM/TBST

Exposure: 3 minutes

IL-33 expression is induced by LPS treatment of PMA-differentiated RAW 264.7 cells (PMID 19559631; PMID 19933859).

All lanes : Anti-IL-33 antibody [EPR17831] (ab187060) at 1/1000 dilution

Lane 1 : Rat lung tissue lysate at 20 µg
Lane 2 : Mouse lung tissue lysate at 10 µg

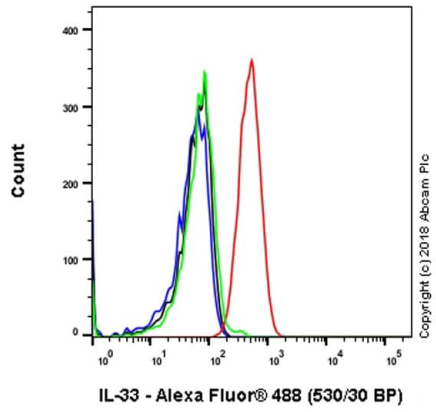
Secondary
Lane 1 : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution
Lane 2 : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Developed using the ECL technique.

Predicted band size: 30 kDa
Observed band size: 30 kDa

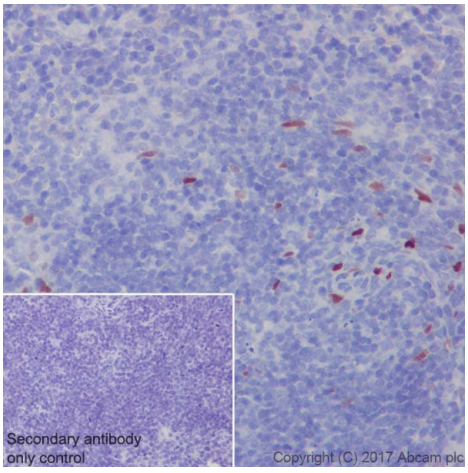
Blocking/Dilution: 5% NFDM/TBST

Exposure: 3 minutes



Flow Cytometry (Intracellular) - Anti-IL-33 antibody [EPR17831] (ab187060)

Intracellular Flow Cytometry analysis ofRAW 264.7 (Mouse Abelson murine leukemia virus-induced tumor macrophage) treated with 50nM PMA and 5µg/ml LPS for 24h (Red) / Untreated control (Green) labeling IL-33 with ab187060 at 1/500 dilution. Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) at 1/2000 was used as the secondary antibody. Cells were fixed with4% paraformaldehyde and permeabilised with0.1% Tween-20.Isotype control - Rabbit monoclonal IgG (**ab172730**) (Black). Unlabelled control - Cell without incubation with primary antibody and secondary antibody (Blue).

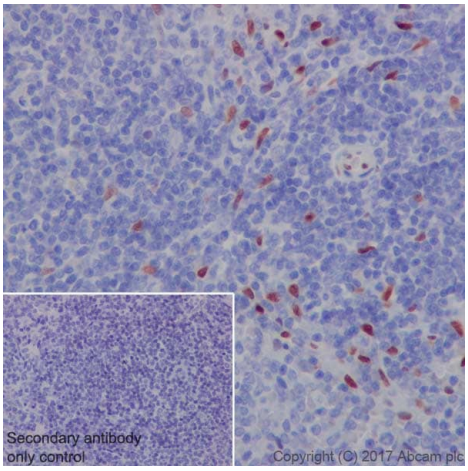


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IL-33 antibody [EPR17831] (ab187060)

Immunohistochemical analysis of paraffin-embedded mouse spleen tissue labeling IL33 with ab187060 at 1/2000 dilution, followed by Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**), ready to use. Nuclear staining in endothelial cells of mouse spleen is observed (PMID: 12819012). Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**), ready to use.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

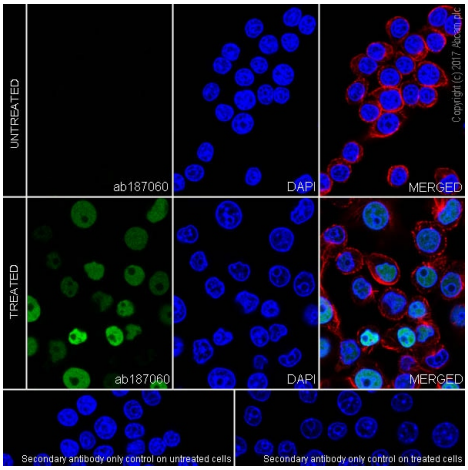


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IL-33 antibody [EPR17831] (ab187060)

Immunohistochemical analysis of paraffin-embedded rat spleen tissue labeling IL33 with ab187060 at 1/2000 dilution, followed by Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**), ready to use. Nuclear staining in endothelial cells of rat spleen is observed (PMID: 12819012). Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**), ready to use.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

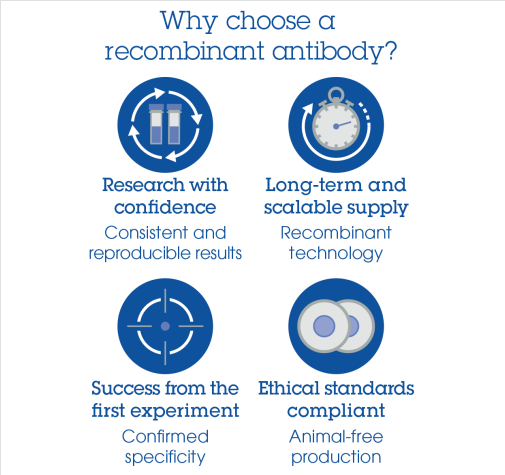


Immunocytochemistry/ Immunofluorescence - Anti-IL-33 antibody [EPR17831] (ab187060)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized RAW 264.7 (mouse macrophage cell line transformed with Abelson murine leukemia virus) cells labeling IL33 with ab187060 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing increased nuclear staining in RAW 264.7 cells treated with 50 nM Phorbol-12-myristate-13-acetate (PMA) and 5 µg/ml Lipopolysaccharide for 24h.

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

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) at 1/1000 dilution.



Anti-IL-33 antibody [EPR17831] (ab187060)

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