

## Product datasheet

# Anti-IL33 antibody [4E9] ab72844

[1 References](#)   [1 Image](#)

### Overview

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<b>Product name</b>	Anti-IL33 antibody [4E9]
<b>Description</b>	Mouse monoclonal [4E9] to IL33
<b>Host species</b>	Mouse
<b>Tested applications</b>	<b>Suitable for:</b> WB, ELISA
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Recombinant human IL33 (112-270 aa) purified from E. coli

**Positive control**

[Purchase matching WB positive control:  
Recombinant Human IL33 protein](#) >

Jurkat cell lysate

### General notes

ab72844 is derived from hybridization of mouse FO myeloma cells with spleen cells from BALB/c mice immunized with a recombinant human IL33 protein.

### Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
<b>Storage buffer</b>	Preservative: 0.1% Sodium Azide Constituents: PBS, pH 7.4
<b>Purity</b>	Protein G purified
<b>Primary antibody notes</b>	ab72844 is derived from hybridization of mouse FO myeloma cells with spleen cells from BALB/c mice immunized with a recombinant human IL33 protein.
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	4E9
<b>Isotype</b>	IgG2b
<b>Light chain type</b>	kappa

### Applications

## Applications

Our [Abpromise guarantee](#) covers the use of **ab72844** 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		1/500 - 1/2000. Detects a band of approximately 26 kDa (predicted molecular weight: 31 kDa).
ELISA		Use at an assay dependent dilution.

## Target

### Function

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 rapidly lost upon angiogenic or proinflammatory activation (PubMed:18787100).

### Tissue specificity

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

### Sequence similarities

Belongs to the IL-1 family. Highly divergent.

### Domain

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

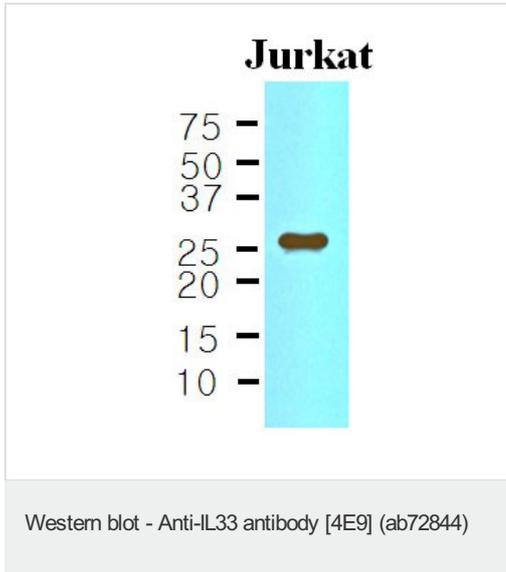
### Post-translational modifications

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.

### Cellular localization

Nucleus. Chromosome. Cytoplasmic vesicle, secretory vesicle. Secreted. Associates with heterochromatin and mitotic chromosomes (PubMed:17185418).

## Images



Anti-IL33 antibody [4E9] (ab72844) at 1/500 dilution + Jurkat cell lysate at 35 µg

**Secondary**

goat anti-mouse secondary antibody conjugated to HRP

Developed using the ECL technique.

**Predicted band size:** 31 kDa

**Observed band size:** 26 kDa

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