

## IL33 (aa165-178) Antibody (internal region)

Peptide-affinity purified goat antibody Catalog # AF3957a

## **Specification**

## IL33 (aa165-178) Antibody (internal region) - Product Information

Application WB, E
Primary Accession 095760

Other Accession NP 254274.1, NP 001186569.1,

NP 001186570.1, 90865

Reactivity
Host
Clonality
Concentration
Isotype

Human
Goat
Polyclonal
0.5 mg/ml

Calculated MW 30759

## IL33 (aa165-178) Antibody (internal region) - Additional Information

#### **Gene ID 90865**

## **Other Names**

Interleukin-33, IL-33, Interleukin-1 family member 11, IL-1F11, Nuclear factor from high endothelial venules, NF-HEV, Interleukin-33 (95-270), Interleukin-33 (99-270), Interleukin-33 (109-270), IL33, C9orf26, IL1F11, NFHEV

# **Dilution**

WB~~1:1000 E~~N/A

### **Format**

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

IL33 (aa165-178) Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

## IL33 (aa165-178) Antibody (internal region) - Protein Information

Name IL33 (HGNC:16028)

Synonyms C9orf26, IL1F11, NFHEV



#### **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: <a href="http://www.uniprot.org/citations/16286016" target="\_blank">16286016</a>, PubMed:<a href="http://www.uniprot.org/citations/19841166" target="blank">19841166</a>). Involved in the maturation of Th2 cells inducing the secretion of T-helper type 2- associated cytokines (PubMed:<a href="http://www.uniprot.org/citations/17853410" target=" blank">17853410</a>, PubMed:<a href="http://www.uniprot.org/citations/18836528" target=" blank">18836528</a>). Also involved in activation of mast cells, basophils, eosinophils and natural killer cells (PubMed: <a href="http://www.uniprot.org/citations/17853410" target="\_blank">17853410</a>, PubMed:<a href="http://www.uniprot.org/citations/18836528" target="blank">18836528</a>). Acts as an enhancer of polarization of alternatively activated macrophages (PubMed: <a href="http://www.uniprot.org/citations/19841166" target=" blank">19841166</a>). Acts as a chemoattractant for Th2 cells, and may function as an 'alarmin', that amplifies immune responses during tissue injury (PubMed:<a href="http://www.uniprot.org/citations/17853410" target=" blank">17853410</a>, PubMed:<a href="http://www.uniprot.org/citations/18836528" target="blank">18836528</a>). Induces rapid UCP2-dependent mitochondrial rewiring that attenuates the generation of reactive oxygen species and preserves the integrity of Krebs cycle required for persistent production of itaconate and subsequent GATA3-dependent differentiation of inflammation-resolving alternatively activated macrophages (By similarity).

#### **Cellular Location**

Nucleus. Chromosome. Cytoplasm Cytoplasmic vesicle, secretory vesicle Secreted Note=Secreted and released in the extracellular milieu by passing through the gasdermin-D (GSDMD) pore following cleavage by CELA1 (PubMed:35794369). Associates with heterochromatin and mitotic chromosomes (PubMed:17185418). The secretion is dependent on protein unfolding and facilitated by the cargo receptor TMED10; it results in protein translocation from the cytoplasm into the ERGIC (endoplasmic reticulum-Golgi intermediate compartment) followed by vesicle entry and secretion (PubMed:32272059).

## **Tissue Location**

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

#### IL33 (aa165-178) Antibody (internal region) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

### IL33 (aa165-178) Antibody (internal region) - Images





AF3957a (1  $\mu$ g/ml) staining of Jurkat lysate (35  $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

# IL33 (aa165-178) Antibody (internal region) - Background

This antibody is expected to recognize all reported isoforms (NP\_254274.1; NP\_001186569.1; NP\_001186570.1).

# IL33 (aa165-178) Antibody (internal region) - References

ST2 and IL-33 in pregnancy and pre-eclampsia. Granne I, Southcombe JH, Snider JV, Tannetta DS, Child T, Redman CW, Sargent IL. PLoS One. 2011;6(9):e24463. PMID: 21949719