

# Human IL-33 antibody

Catalog Number: AIL0824

## PRODUCT INFORMATION

---

**Catalog number**

AIL0824

**Clone No.**

4E9

**Product type**

Monoclonal Antibody

**UnitProt No.**

O95760

**NCBI Accession No.**

NP\_254274

**Alternative Names**

Interleukin-33, Interleukin-1 family member 11, IL-1F11, Nuclear factor from high endothelial venules, NF-HEV, DVS27-related protein, DVS27, C9orf26

## PRODUCT SPECIFICATION

---

**Antibody Host**

Mouse

**Reacts With**

Human

**Concentration**

1mg/ml (determined by BCA assay)

**Formulation**

Liquid in. Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% glycerol

**Immunogen**

Recombinant human IL-33 (112-270aa) purified from E. coli

**Isotype**

IgG2b kappa

**Purification Note**

By protein-G affinity chromatography

**Application**

ELISA, WB, ICC/IF, FACS

**Usage**

The antibody has been tested by ELISA, Western blot, ICC/IF and FACS analysis to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results.

# Human IL-33 antibody

Catalog Number: AIL0824

## Storage

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

### Description

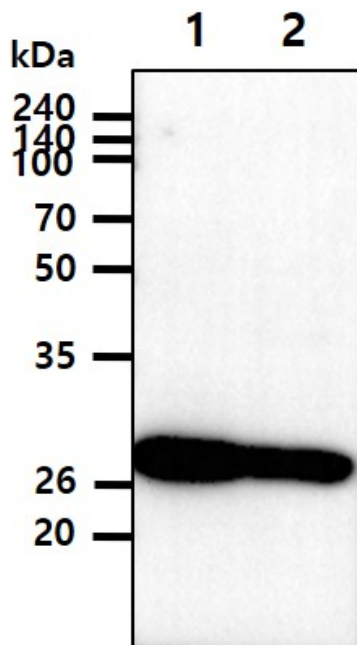
Interleukin 33 (IL-33) is a 32kDa proinflammatory cytokine and intracellular nuclear factor with transcriptional regulatory properties. IL-33 is structurally related to IL-1, which induces helper T cells to produce type 2 cytokines and acts through the receptor IL1RL-1 (IL1 receptor-like-1), which is known also as ST2. Binding of IL-33 to this receptor activates NF-kappa-B and MAP kinases and induces in vitro Th2 cells to produce cytokines. In vivo, IL-33 induces expression of IL-4, IL-5, IL-13 and leads to severe pathological changes in mucosal organs and in vitro, it can be divided to N-terminal fragment of 12kDa and C-terminal fragment of 18kDa by cleavage of caspase-1.

### General References

- Brint Ek, et al., (2005) J Biol Chem. 20:277(51).
- Schmitz, et al., (2005) immunity. 23:479.
- Baekkevold ES, et al., (2003) Am.J.Pathol. 163(1):69-90.

## DATA

### Western blot analysis (WB)

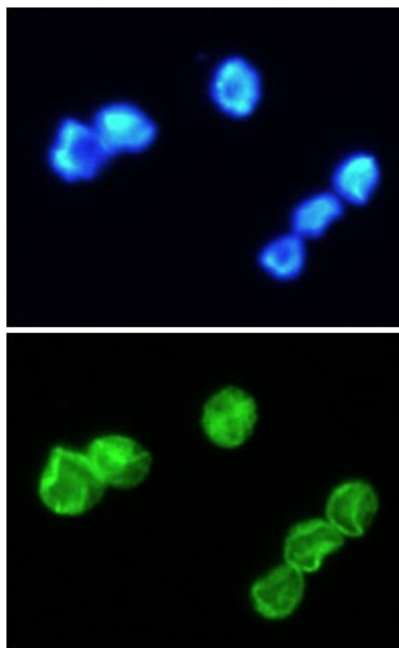


The cell lysates(40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human IL-33 antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.  
Lane 1.: 293T cell lysate  
Lane 2.: Jurkat cell lysate

### Immunocytochemistry/Immunofluorescence (ICC/IF)

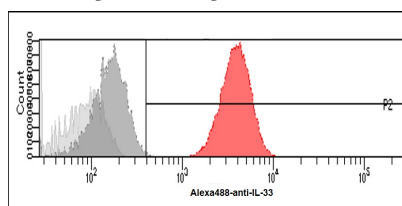
## Human IL-33 antibody

Catalog Number: AIL0824



ICC/IF analysis of IL-33 in Jurkat cells. The cell was stained with AIL0824 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).

### Flow cytometry (FACS)



Flow cytometry analysis of IL-33 in Jurkat cells. The cell was stained with AIL0824 at 2-5ug for  $1 \times 10^6$  cells (red). A Goat anti mouse IgG (Alexa fluor 488) was used as the secondary antibody. Mouse monoclonal IgG was used as the isotype control (dark gray), cells without incubation with primary and secondary antibody was used as the negative control (light gray).