

## Anti-IL-33 [309h] Bulk Size Ab03652-10.3-BT

This antibody was created using our proprietary Fc Silent™ engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors.

This is a reformatted human IgG1 Fc Silent Fc Silent™ antibody, based on the original human IgG1 format, created for improved compatibility with existing reagents, assays and techniques.

**Isotype and Format:** Human IgG1, Fc Silent™, Kappa

**Clone Number:** 309h

**Alternative Name(s) of Target:** Interleukin-33; C9orf26; IL1F11; NFHEV; Interleukin-1 family member 11; IL-1F11; Nuclear factor from high endothelial venules; NF-HEV

**UniProt Accession Number of Target Protein:** O95760

**Published Application(s):** functional assay, inhibit, Block, ELISA

**Published Species Reactivity:** Human

**Immunogen:** The original mouse antibody was generated by immunizing BALB/c mice with recombinant human IL-33 (112-270 amino acid fragment)-his tagged protein. The humanized version was generated by grafting CRDs of mouse antibody onto human framework regions.

**Specificity:** This antibody binds an epitope between amino acid residues Ser112-Thr270 of the human IL-33. Interleukin 33 (IL-33) is a multifunctional cytokine which is constitutively expressed in structural cells such as smooth muscle cells, fibroblasts, mast cells, dendritic cells, macrophages, osteoblasts, epithelial cells, and endothelial cells. It is involved in the maturation of Th2 cells inducing the secretion of T-helper type 2-associated cytokines like IL-4, IL-5 and IL-13. It is also involved in activation of mast cells, basophils, eosinophils and natural killer cells. A study found that IL-33 is a bifunctional protein. On the one hand, IL-33 is localized in the nucleus and acts as a transcription factor; on the other hand, IL-33 is secreted outside the cell and acts as a cytokine by interacting with its receptor ST2.

**Application Notes:** The humanized IgG1 version of this antibody binds human IL-33 and blocks the binding of human IL-33 to IL-33R-ECD-HFC with an IC50 of 65.93ng/ml. The binding characterization of this antibody to human IL-33 was done using ELISA. This antibody was reported to inhibit IL-33 induced secretion of IL-5 by KU812 cells (CN112480252).

**Antibody First Published in:** [PMID:](#)

**Note on publication:**

## Product Form

**Size:** 1 mg Purified antibody in bulk size.

**Purification:** Protein A affinity purified

**Supplied In:** PBS only.

**Storage Recommendation:** Store at 4°C for up to 3 months. Note, this antibody is provided without added preservatives, it is therefore recommended this antibody be handled under sterile conditions. For longer storage, aliquot and store at -20°C.

**Concentration:** 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.