

Anti-Human IL-33 (RABBIT) Antibody Peroxidase Conjugated
IL-33 Antibody Peroxidase Conjugated
Catalog # ASR4951

Specification

Anti-Human IL-33 (RABBIT) Antibody Peroxidase Conjugated - Product Information

Host	Rabbit
Conjugate	Peroxidase (Horseradish)
Target Species	Human
Reactivity	Human
Clonality	Polyclonal
Application	WB, IHC, E, I, LCI
Application Note	This purified antibody has been tested in western blotting and suitable for ELIAA. By western blot a band approximately 18 kDa in size corresponding to mature human IL-32 α protein is expected in the appropriate cell lysate or extract. Specific conditions for reactivity should be optimized by the end user.
Physical State	Lyophilized
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	This purified antibody was prepared from whole rabbit serum produced by repeated immunizations with full length recombinant human IL-33 protein.
Reconstitution Volume	100 μ L
Reconstitution Buffer	Restore with deionized water (or equivalent)
Stabilizer	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Preservative	0.01% (w/v) Gentamicin Sulfate. Do NOT add Sodium Azide!

Anti-Human IL-33 (RABBIT) Antibody Peroxidase Conjugated - Additional Information

Gene ID 90865

Other Names
90865

Purity

This purified antibody has been heated to 56°C for 30 minutes. In ELISA and other immunoreactive assays, this antibody will recognize both native and recombinant human IL-33 in cell supernatants and certain body fluids. A control of similarly diluted normal rabbit IgG is recommended.

Storage Condition

Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after

standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-Human IL-33 (RABBIT) Antibody Peroxidase Conjugated - 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:16286016, PubMed:19841166). Involved in the maturation of Th2 cells inducing the secretion of T-helper type 2- associated cytokines (PubMed:17853410, PubMed:18836528). Also involved in activation of mast cells, basophils, eosinophils and natural killer cells (PubMed:17853410, PubMed:18836528). Acts as an enhancer of polarization of alternatively activated macrophages (PubMed:19841166). Acts as a chemoattractant for Th2 cells, and may function as an 'alarmin', that amplifies immune responses during tissue injury (PubMed:17853410, PubMed:18836528). 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.

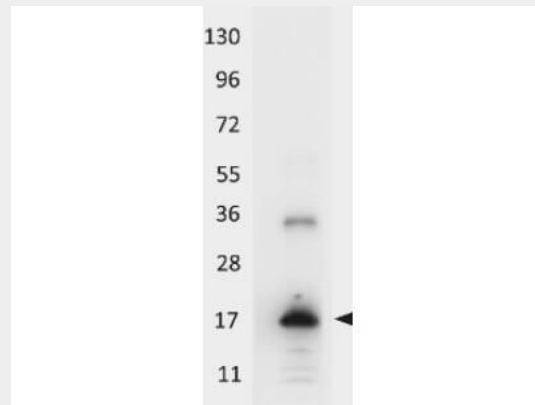
Anti-Human IL-33 (RABBIT) Antibody Peroxidase Conjugated - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-Human IL-33 (RABBIT) Antibody Peroxidase Conjugated - Images



Western blot using Rockland's HRP conjugated anti-Human IL-33 antibody shows detection of a band ~18 kDa in size corresponding to recombinant human IL-33. The identity of the higher molecular weight band is unknown. Molecular weight markers are shown (left). After transfer, the membrane was blocked with 3% BSA in TBS followed by reaction with antibody at a 1:5,000 dilution for 30 min at room temperature. Detection occurred using TMB substrate.

Anti-Human IL-33 (RABBIT) Antibody Peroxidase Conjugated - Background

IL-33 (also known as Interleukin-33, Interleukin-1 family member 11, IL-1F11, nuclear factor from high endothelial venules and NF-HEV) is a cytokine that binds to and signals through IL1RL1/ST2 and its stimulation recruits MYD88, IRAK1, IRAK4, and TRAF6, followed by phosphorylation of MAPK3/ERK1 and/or MAPK1/ERK2, MAPK14, and MAPK8. IL-33 induces T helper type 2-associated cytokines. IL-33 is a secreted cytokine that is expressed at high levels in high endothelial venules found in tonsils, Peyer patches and mesenteric lymph nodes and is almost undetectable in placenta. The 31 kDa precursor is proteolytically converted to an 18 kDa mature form by CASP1.