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Anti-Human IL-33 (RABBIT) Antibody Biotin Conjugated

IL-33 Antibody Biotin Conjugated
Catalog # ASR4965

Specification

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

Host	**Rabbit**
Conjugate	**Biotin**
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 ELISA. By western blot a band approximately 18 kDa in size corresponding to mature human IL-32α 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 µL**
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) Sodium Azide**

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

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry

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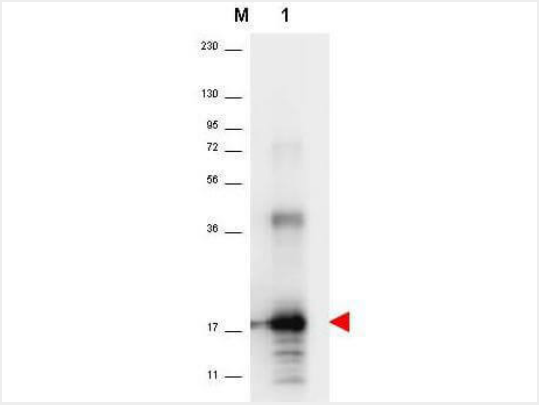
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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



Western blot using Rockland's anti-Human IL-33 antibody shows detection of a band ~18 kDa in size corresponding to recombinant human IL-33 (lane 1). The identity of the higher molecular weight band is unknown. Molecular weight markers are also shown (M). After transfer, the membrane was blocked overnight with 3% BSA in TBS followed by reaction with primary antibody at a 1:1,000 dilution. Detection occurred using peroxidase conjugated anti-Rabbit IgG (p/n 611-103-122) secondary antibody diluted 1:40,000 in blocking buffer (p/n MB-070) for 30 min at RT followed by reaction with FemtoMax™ chemiluminescent substrate. Image was captured using VersaDoc™ MP 4000 imaging system (Bio-Rad).

Anti-Human IL-33 (RABBIT) Antibody Biotin 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.