

**Anti-IL-33 Reference Antibody (tozorakimab)  
Recombinant Antibody  
Catalog # APR10053****Specification**

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**Anti-IL-33 Reference Antibody (tozorakimab) - Product Information**

Application	FC, Kinetics, Animal Model
Primary Accession	<a href="#">O95760</a>
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	144.66 KDa

**Anti-IL-33 Reference Antibody (tozorakimab) - Additional Information****Target/Specificity**  
IL-33**Endotoxin**  
< 0.001EU/ µg,determined by LAL method.**Conjugation**  
Unconjugated**Expression system**  
CHO Cell**Format**  
Purified monoclonal antibody supplied in PBS, pH6.0, without preservative.This antibody is purified through a protein A column.**Anti-IL-33 Reference Antibody (tozorakimab) - 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

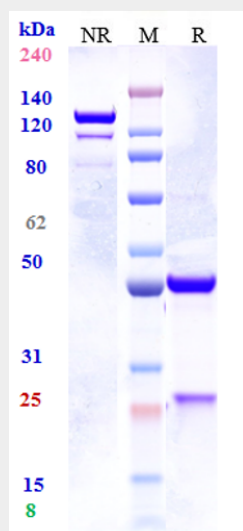
Expressed at high level in high endothelial venules found in tonsils, Peyer patches and mesenteric lymph nodes. Almost undetectable in placenta.

## Anti-IL-33 Reference Antibody (tozorakimab) - Protocols

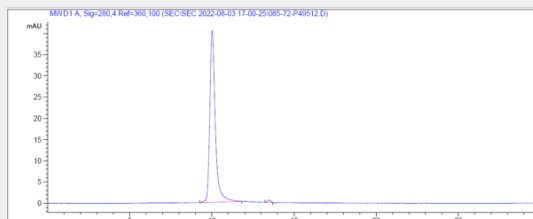
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

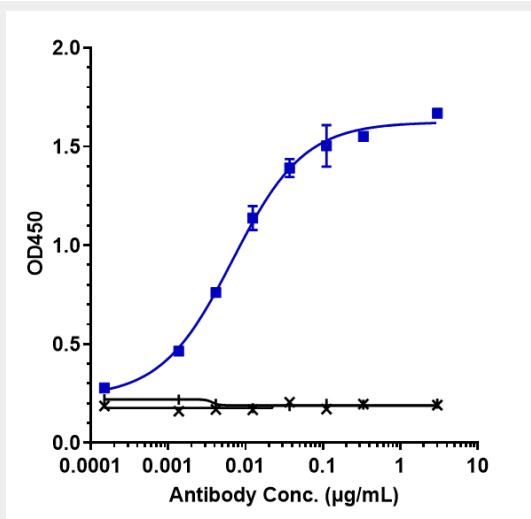
## Anti-IL-33 Reference Antibody (tozorakimab) - Images



Anti-IL-33 Reference Antibody (tozorakimab) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%



The purity of Anti-IL-33 Reference Antibody (tozorakimab) is more than 99.21% ,determined by SEC-HPLC.



Immobilized human IL 33 His at 2 µg/mL can bind Anti-IL-33 Reference Antibody (tozorakimab)  $EC_{50}=0.006821$  µg/mL