

Anti-IL-33 Reference Antibody (itepekimab)

Recombinant Antibody Catalog # APR10338

Specification

Anti-IL-33 Reference Antibody (itepekimab) - Product Information

Application FC, Kinetics, Animal Model
Primary Accession
Reactivity Human
Clonality Monoclonal
Isotype IgG4SP
Calculated MW 144.64 KDa

Anti-IL-33 Reference Antibody (itepekimab) - Additional Information

Target/Specificity

IL-33

Endotoxin

 $< 0.001EU/ \mu g$, 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 (itepekimab) - 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/a>, 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

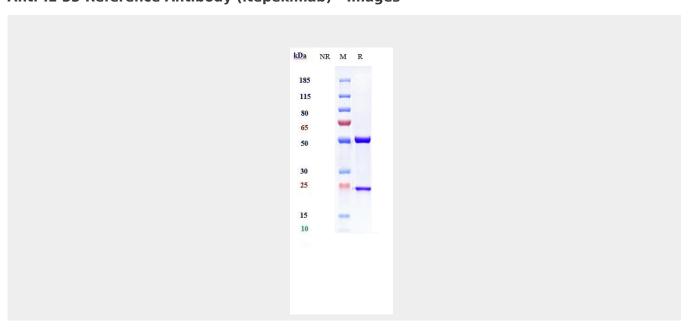
Expressed at high level in high endothelial venules found in tonsils, Peyer patches and mesenteric lymph nodes. Almost undetectable in placenta.

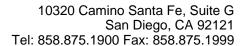
Anti-IL-33 Reference Antibody (itepekimab) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

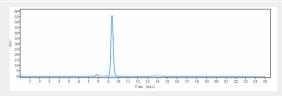
Anti-IL-33 Reference Antibody (itepekimab) - Images







Anti-IL-33 Reference Antibody (itepekimab) 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 (itepekimab)is more than 97.5% ,determined by SEC-HPLC.