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IL33 Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP14363a

Specification

IL33 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession O95760

IL33 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 90865

Other Names
Interleukin-33, IL-33, Interleukin-1 family member 11, IL-1F11, Nuclear factor from high endothelial venules, NF-HEV, Interleukin-33 (95-270), Interleukin-33 (99-270), Interleukin-33 (109-270), IL33, C9orf26, IL1F11, NFHEV

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

IL33 Antibody (N-term) Blocking Peptide - 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:<a href="http://www.uniprot.org/citations/17853410"

target="_blank">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.

IL33 Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

IL33 Antibody (N-term) Blocking Peptide - Images

IL33 Antibody (N-term) Blocking Peptide - Background

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. Induces T helper type 2-associated cytokines.

IL33 Antibody (N-term) Blocking Peptide - References

Yagami, A., et al. J. Immunol. 185(10):5743-5750(2010)Masamune, A., et al. Am. J. Physiol. Gastrointest. Liver Physiol. 299 (4), G821-G832 (2010) :Melen, E., et al. J. Allergy Clin. Immunol. 126(3):631-637(2010)Corneveaux, J.J., et al. Hum. Mol. Genet. 19(16):3295-3301(2010)Yu, J.T., et al. Neurobiol. Aging (2010) In press :