

Rabbit Anti-IL33/AP Conjugated antibody

SL2208R-AP

Product Name	Anti-IL33/AP
Chinese Name	碱性磷酸酶（AP）标记的白介素 33 抗体
Alias	IL-33; Interleukin-33/Nuclear factor from high endothelial venules; IL33; C9orf26; CHROMOSOME 9 OPEN READING FRAME 26; DKFZp586H0523; DVS27; DVS27 related protein; IL 1F11; IL 33; IL1F11; Interleukin 1 family member 11; Interleukin 33; INTERLEUKIN 33 NFHEV; Interleukin 33 precursor; Interleukin33; NF HEV; NFEHEV; NFHEV; Nuclear factor from high endothelial venules; RP11 575C20.2 IL33_HUMAN.
Research Area	Cardiovascular immunology Kinases and Phosphatases
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human,Rat
Applications	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight	31kDa
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human IL-33 Propeptide
Lsotype	IgG
Purification	affinity purified by Protein A
Storage Buffer	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Storage	
Product Detail	background: IL33 is a cytokine which belongs to the IL-1 superfamily, and it induces helper T cells to produce type 2 cytokines. This cytokine was previously named

NF-HEV 'nuclear factor (NF) in high endothelial venules' (HEVs), as it was originally identified in these specialized cells.

IL33 mediates its biological effects by interacting with the receptors ST2 and IL-1 Receptor Accessory Protein, activating intracellular molecules in the NF-kappaB and MAP kinase signaling pathways that drive production of type 2 cytokines (e.g. IL-4, IL-5 and IL-13) from polarized Th2 cells. The induction of type 2 cytokines by IL-33 in vivo is believed to induce the the severe pathological changes observed in mucosal organs following administration of IL33.

Function:

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. Acts as a chemoattractant for Th2 cells, and may function as an 'alarmin', that amplifies immune responses during tissue injury.

In quiescent endothelia the uncleaved form is constitutively and abundantly expressed, and acts as a chromatin-associated nuclear factor with transcriptional repressor properties, it may sequester nuclear NF-kappaB/RELA, lowering expression of its targets. This form is rapidly lost upon angiogenic or proinflammatory activation.

Subunit:

Forms a 1:1:1 heterotrimeric complex with its primary high-affinity receptor IL1RL1 and the coreceptor IL1RAP.

Subcellular Location:

Nucleus. Chromosome. Cytoplasmic vesicle, secretory vesicle. Secreted.

Note=Associates with heterochromatin and mitotic chromosomes.

Translocation from the nucleus occurs upon biomechanical strain, depends on an intact microtubule network, and is ATP-dependent.

Tissue Specificity:

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

Post-translational modifications:

Proteolytically converted to a mature form by CASP1 in vitro and calpains in vivo. Caspase-mediated proteolysis, once thought to activate IL33, rather acts as a switch to dampen its activity. Cathepsin G and elastase can cleave IL33 and generate highly active forms in activated neutrophils (IL-33(95-270), IL-33(99-270) and IL-33(109-270)). Proteolysis is not strictly required for biological activity.

Similarity:

Belongs to the IL-1 family. Highly divergent.

Database links:

[Entrez Gene: 90865](#) Human

[Entrez Gene: 77125](#) Mouse

[Omid: 608678](#) Human

[SwissProt: O95760](#) Human

[SwissProt: Q8BVZ5](#) Mouse

[Unigene: 731660](#) Human

[Unigene: 182359](#) Mouse

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.