

Rabbit Anti-IL33 antibody

SL10707R

Product Name:	IL33
Chinese Name:	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.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	18kDa
Cellular localization:	The nucleuscytoplasmicSecretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human IL33:101-200/270
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	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 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	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 tor 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 rapidely 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.

SWISS:

O95760

Gene ID: 90865

Database links:

Entrez Gene: 90865Human

Entrez Gene: 77125Mouse

Omim: 608678Human

SwissProt: O95760Human

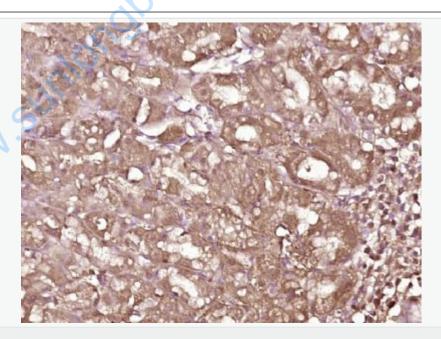
SwissProt: Q8BVZ5Mouse

Unigene: 731660Human

Unigene: 182359 Mouse

Important Note:

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



Picture:

Paraformaldehyde-fixed, paraffin embedded (human stomach tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat

serum) at 37°C for 30min; Antibody incubation with (IL33) Polyclonal Antibody,
Unconjugated (SL10707R) at 1:400 overnight at 4°C, followed by operating
according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

