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IL-37 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51904

Product Information

Application	WB
Primary Accession	Q9NZH6
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	24126

Additional Information

Gene ID	27178
Other Names	Interleukin-37, FIL1 zeta, IL-1X, Interleukin-1 family member 7, IL-1F7, Interleukin-1 homolog 4, IL-1H, IL-1H4, Interleukin-1 zeta, IL-1 zeta, Interleukin-1-related protein, IL-1RP1, Interleukin-23, IL-37, IL37, FIL1Z, IL1F7, IL1H4, IL1RP1
Dilution	WB~~1:1000
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	IL37 (HGNC:15563)
Function	Immune regulatory cytokine that acts as a suppressor of innate inflammatory and immune responses involved in curbing excessive inflammation. Signaling can occur via two mechanisms, intracellularly through nuclear translocation with SMAD3 and extracellularly after secretion and binding to its receptor composed of IL18R1 and IL18RAP. Suppresses, or reduces, pro-inflammatory cytokine production, including IL1A and IL6, as well as CCL12, CSF1, CSF2, CXCL13, IL1B, IL23A and IL1RN, but spares anti-inflammatory cytokines. Inhibits dendritic cell activation.
Cellular Location	Cytoplasm, cytosol. Nucleus. Secreted Note=Stimulation with IL1B leads to colocalization with SMAD3 mostly in perinuclear regions (PubMed:20935647, PubMed:33674380). Only the CASP1- cleaved mature form translocates into the nucleus upon LPS stimulation (PubMed:18390730). 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, PubMed:33674380).
Tissue Location	In general, low constitutive expression, if any, in healthy tissues; high expression in inflammatory counterparts, including in synovial tissues from individuals with active rheumatoid arthritis. Isoform A, isoform B and isoform C are expressed in testis, colon, placenta, lung and lymph node. Isoform D and isoform E were found only in testis and bone marrow. Whereas only isoform A is found in brain, only isoform B in kidney and only isoform C in heart

Background

Suppressor of innate inflammatory and immune responses involved in curbing excessive inflammation. This function requires SMAD3. Suppresses, or reduces, proinflammatory cytokine production, including IL1A and IL6, as well as CCL12, CSF1, CSF2, CXCL13, IL1B, IL23A and IL1RN, but spares anti-inflammatory cytokines. Inhibits dendritic cell activation.

References

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