

IL-37 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51904

Specification

IL-37 Antibody - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW

WB, E
O9NZH6
Human, Mouse, Rat
Rabbit
Polyclonal
26 KDa

IL-37 Antibody - 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 E~~N/A

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

IL-37 Antibody - 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

IL-37 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

IL-37 Antibody - Images

IL-37 Antibody - 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.

IL-37 Antibody - References

Kumar S., et al.J. Biol. Chem. 275:10308-10314(2000). Manoj P.P., et al.Submitted (JUL-1999) to the EMBL/GenBank/DDBJ databases. Pan G., et al.Cytokine 13:1-7(2001). Smith D.E., et al.J. Biol. Chem. 275:1169-1175(2000). Taylor S.L., et al.Genomics 79:726-733(2002).