

Anti-IL-1b Reference Antibody (CDP484)

Recombinant Antibody Catalog # APR10621

Specification

Anti-IL-1b Reference Antibody (CDP484) - Product Information

Application Primary Accession Reactivity Clonality Isotype

Calculated MW

FC, Kinetics, Animal Model P01584

Human

Human, Mouse Monoclonal

IqG1

145.74 KDa

Anti-IL-1b Reference Antibody (CDP484) - Additional Information

Target/Specificity

IL-1b

Endotoxin

< 0.001EU/ µg,determined by LAL method.

Conjugation

Unconjugated

Expression system

CHO Cell

Format

Purified monoclonal antibody supplied in PBS, pH6.0, without preservative. This antibody is purified through a protein A column.

Anti-IL-1b Reference Antibody (CDP484) - Protein Information

Name IL1B (HGNC:5992)

Synonyms IL1F2

Function

Potent pro-inflammatory cytokine (PubMed:10653850, PubMed:12794819, PubMed:28331908, PubMed:3920526). Initially discovered as the major endogenous pyrogen, induces prostaglandin synthesis, neutrophil influx and activation, T-cell activation and cytokine production, B-cell activation and antibody production, and fibroblast proliferation and collagen production (PubMed:3920526). Promotes Th17 differentiation of T-cells. Synergizes with IL12/interleukin-12 to induce IFNG synthesis from T-helper 1 (Th1) cells (PubMed:<a



href="http://www.uniprot.org/citations/10653850" target="_blank">10653850). Plays a role in angiogenesis by inducing VEGF production synergistically with TNF and IL6 (PubMed:12794819). Involved in transduction of inflammation downstream of pyroptosis: its mature form is specifically released in the extracellular milieu by passing through the gasdermin-D (GSDMD) pore (PubMed:33377178, PubMed:33883744). Acts as a sensor of S.pyogenes infection in skin: cleaved and activated by pyogenes SpeB protease, leading to an inflammatory response that prevents bacterial growth during invasive skin infection (PubMed:28331908/a>).

Cellular Location

Cytoplasm, cytosol. Secreted. Lysosome Secreted, extracellular exosome {ECO:0000250|UniProtKB:P10749} Note=The precursor is cytosolic (PubMed:15192144). In response to inflammasome-activating signals, such as ATP for NLRP3 inflammasome or bacterial flagellin for NLRC4 inflammasome, cleaved and secreted (PubMed:24201029, PubMed:33377178, PubMed:33883744). Mature form is secreted and released in the extracellular milieu by passing through the gasdermin-D (GSDMD) pore (PubMed:33883744). In contrast, the precursor form is not released, due to the presence of an acidic region that is proteolytically removed by CASP1 during maturation (PubMed:33883744). The secretion is dependent on protein unfolding and facilitated by the cargo receptor TMED10 (PubMed:32272059)

Tissue Location

Expressed in activated monocytes/macrophages (at protein level).

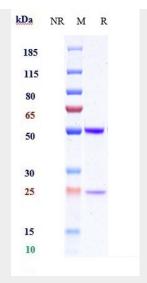
Anti-IL-1b Reference Antibody (CDP484) - Protocols

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

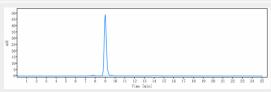
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Anti-IL-1b Reference Antibody (CDP484) - Images





Anti-IL-1b Reference Antibody (CDP484) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%



The purity of Anti-IL-1b Reference Antibody (CDP484)is more than 95% ,determined by SEC-HPLC.