

Anti-IL-1b Reference Antibody (CDP484)

Recombinant Antibody
Catalog # APR10621

Product Information

Application	FC, Kinetics, Animal Model
Primary Accession	P01584
Reactivity	Human, Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	30748

Additional Information

Target/Specificity	IL-1b
Endotoxin 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.

Protein Information

Name	IL1B (HGNC:5992)
Synonyms	IL1F2
Function	<p>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: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).</p> <p>Cytoplasm, cytosol. Secreted. Lysosome Secreted, extracellular exosome</p>

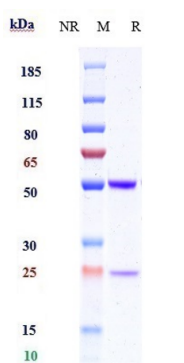
Cellular Location

{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)

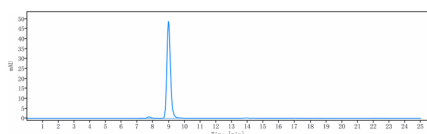
Tissue Location

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

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.

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