

IL-1β Polyclonal Antibody

Catalog # AP73384

Specification

IL-1β Polyclonal Antibody - Product Information

Application WB, IHC-P Primary Accession P01584

Reactivity Human, Mouse, Rat Host Rabbit

Host Rabbit Clonality Polyclonal

IL-1β Polyclonal Antibody - Additional Information

Gene ID 3553

Other Names

IL1B; IL1F2; Interleukin-1 beta; IL-1 beta; Catabolin

Dilution

WB~~Western Blot: 1/500 - 1/2000. IHC-p: 1:100-300 ELISA: 1/20000. Not yet tested in other applications. IHC-P~ \sim N/A

Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions

-20°C

IL-1β Polyclonal Antibody - 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:10653850). Plays a role

in angiogenesis by inducing VEGF production synergistically with TNF and IL6 (PubMed: <a



href="http://www.uniprot.org/citations/12794819" target="_blank">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).

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).

IL-1ß Polyclonal Antibody - Protocols

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

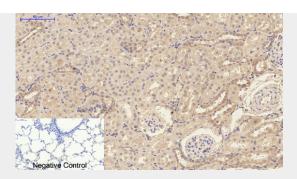
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

IL-1β Polyclonal Antibody - Images

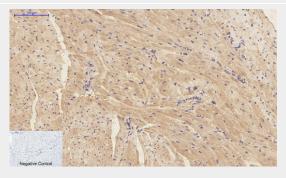


Immunohistochemical analysis of paraffin-embedded Human-uterus tissue. 1,IL-1 β Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.

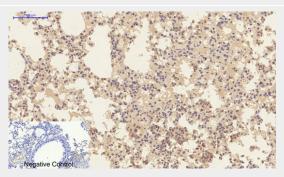




Immunohistochemical analysis of paraffin-embedded Rat-lung tissue. 1,IL- 1β Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.

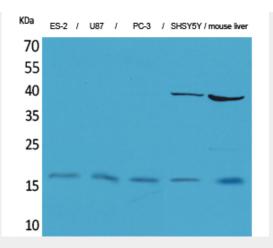


Immunohistochemical analysis of paraffin-embedded Mouse-heart tissue. $1,IL-1\beta$ Polyclonal Antibody was diluted at $1:200(4^{\circ}C, overnight)$. 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at $1:200(room\ tempeRature,\ 30min)$. Negative control was used by secondary antibody only.

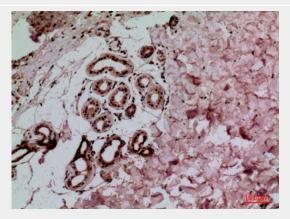


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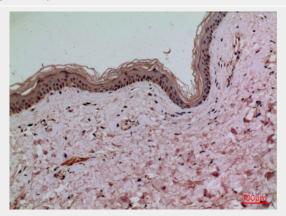




Western Blot analysis of ES-2, U87, PC-3, SHSY5Y, mouse liver cells using IL-1 β Polyclonal Antibody. Antibody was diluted at 1:2000. Secondary antibody was diluted at 1:20000

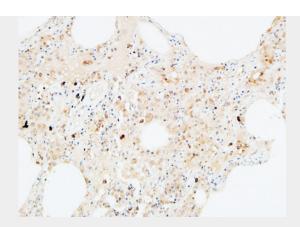


Immunohistochemical analysis of paraffin-embedded human-skin, antibody was diluted at 1:100

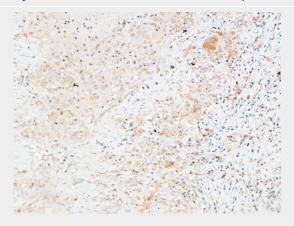


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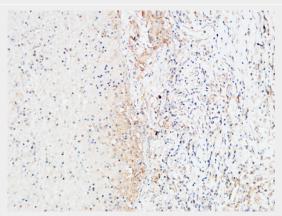




Immunohistochemical analysis of paraffin-embedded Human lung. 1, Antibody was diluted at 1:200(4°,overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).

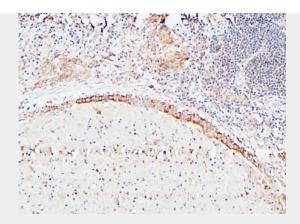


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