

IL1 beta Antibody

Rabbit mAb

Catalog # AP90961

Product Information

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|--------------------------|---|
| Application | WB |
| Primary Accession | P01584 |
| Reactivity | Human |
| Clonality | Monoclonal |
| Other Names | Catabolin; Hematopoietin 1; IFN beta inducing factor; IL 1 beta; IL 1B; IL-1 beta; IL1 BETA; IL1B; IL1B; IL1F2; Interleukin 1 beta; Interleukin 1 beta precursor; LAF; OAF; |
| Isotype | Rabbit IgG |
| Host | Rabbit |
| Calculated MW | 30748 |

Additional Information

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| Dilution | WB 1:500~1:2000 |
| Purification | Affinity-chromatography |
| Immunogen | A synthesized peptide derived from human IL1 beta |
| Description | Produced by activated macrophages, IL-1 stimulates thymocyte proliferation by inducing IL-2 release, B-cell maturation and proliferation, and fibroblast growth factor activity. IL-1 proteins are involved in the inflammatory response, being identified as endogenous pyrogens, and are reported to stimulate the release of prostaglandin and collagenase from synovial cells. |
| Storage Condition and Buffer | Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle. |

Protein Information

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| 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: 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](#)).

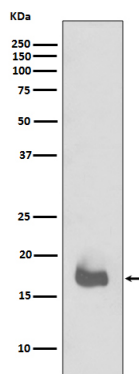
Cellular Location

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).

Images



Western blot analysis of IL1 beta expression in recombinant IL1 beta protein.

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