

**IL-1 $\beta$  Polyclonal Antibody**  
Catalog # AP73384**Specification****IL-1 $\beta$  Polyclonal Antibody - Product Information**

|                   |                        |
|-------------------|------------------------|
| Application       | WB                     |
| Primary Accession | <a href="#">P01584</a> |
| Reactivity        | Human, Mouse, Rat      |
| Host              | Rabbit                 |
| Clonality         | Polyclonal             |

**IL-1 $\beta$  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.

**Format**

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

**Storage Conditions**

-20°C

**IL-1 $\beta$  Polyclonal Antibody - Protein Information**Name IL1B ([HGNC:5992](#))

Synonyms IL1F2

**Function**

Potent pro-inflammatory cytokine (PubMed: [10653850](http://www.uniprot.org/citations/10653850), PubMed: [12794819](http://www.uniprot.org/citations/12794819), PubMed: [28331908](http://www.uniprot.org/citations/28331908), PubMed: [3920526](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/3920526)). Promotes Th17 differentiation of T-cells. Synergizes with IL12/interleukin-12 to induce IFNG synthesis from T-helper 1 (Th1) cells (PubMed: [10653850](http://www.uniprot.org/citations/10653850)). Plays a role in angiogenesis by inducing VEGF production synergistically with TNF and IL6 (PubMed: [12794819](http://www.uniprot.org/citations/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:<a href="http://www.uniprot.org/citations/33377178" target="\_blank">33377178</a>, PubMed:<a href="http://www.uniprot.org/citations/33883744" target="\_blank">33883744</a>). 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:<a href="http://www.uniprot.org/citations/28331908" target="\_blank">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

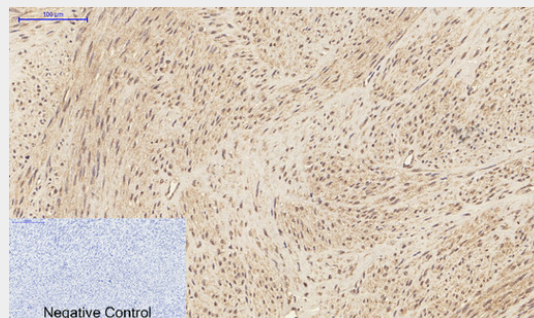
Expressed in activated monocytes/macrophages (at protein level).

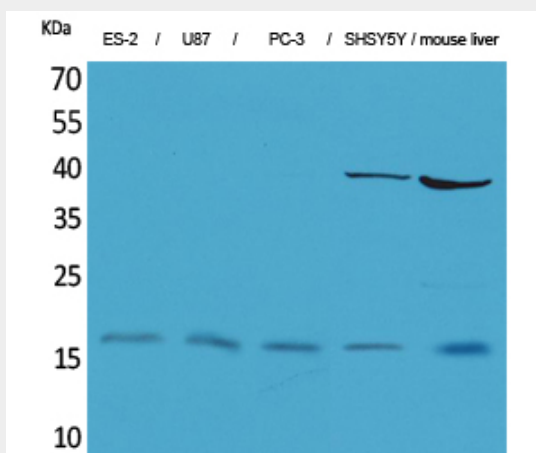
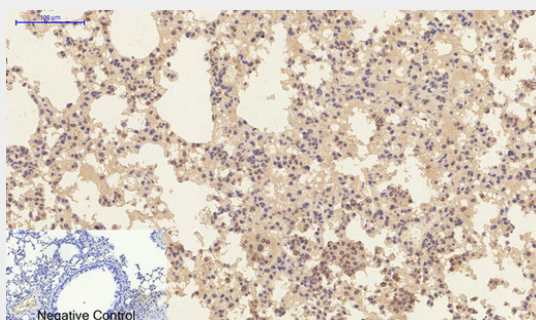
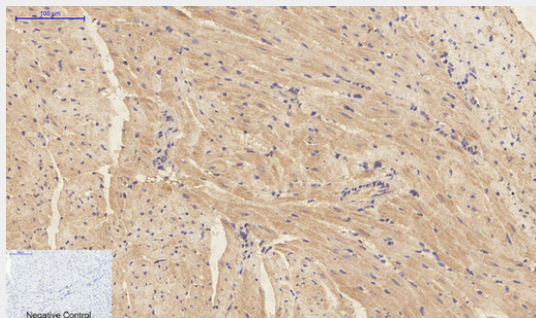
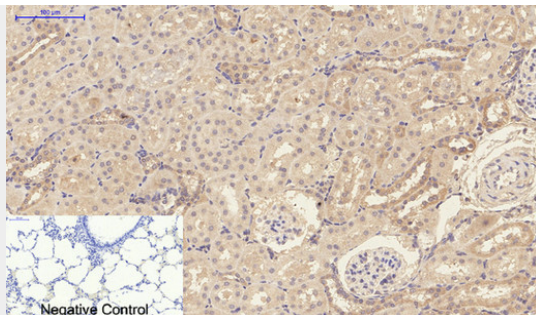
## IL-1 $\beta$ Polyclonal Antibody - Protocols

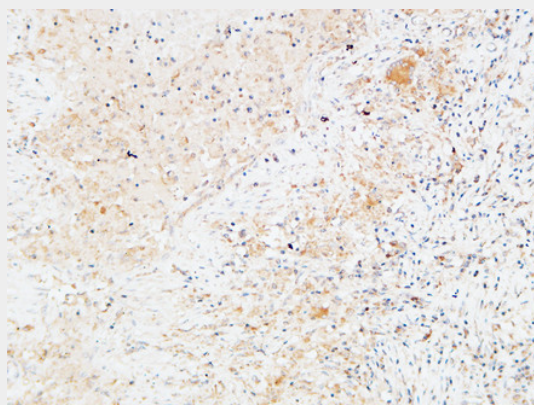
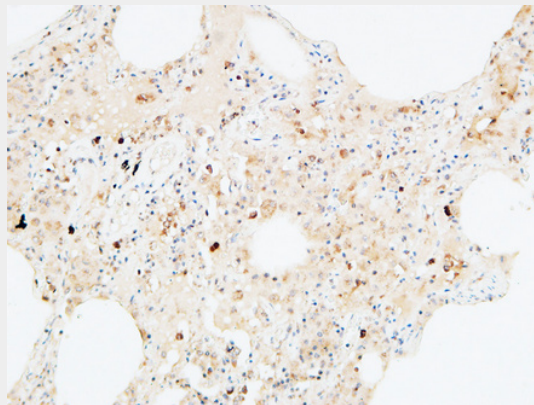
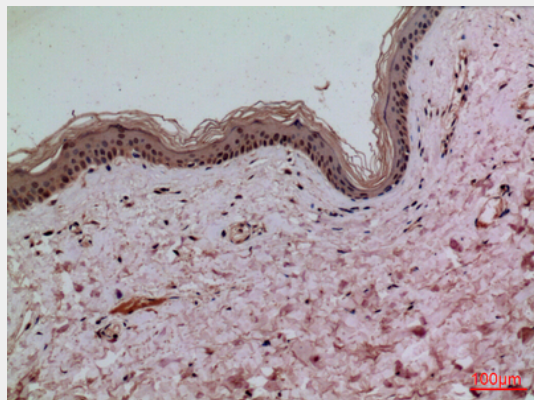
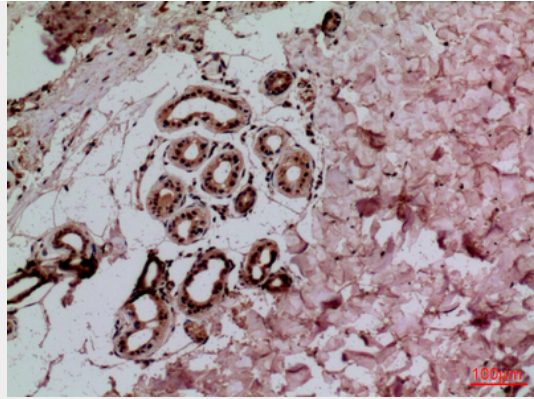
Provided below are standard protocols that you may find useful for product applications.

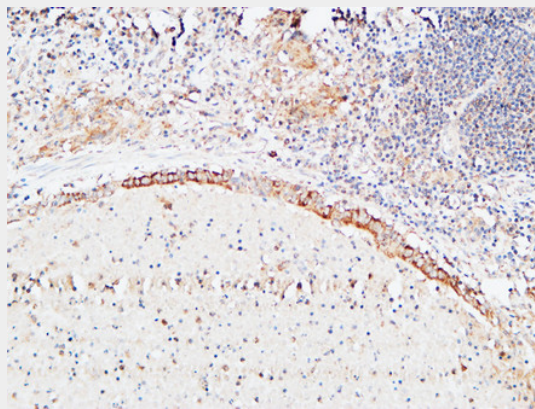
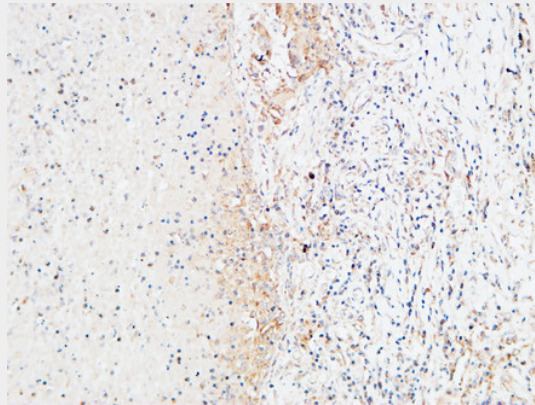
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## IL-1 $\beta$ Polyclonal Antibody - Images









### **IL-1 $\beta$ Polyclonal Antibody - Background**

Potent proinflammatory cytokine. 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. Promotes Th17 differentiation of T-cells. Synergizes with IL12/interleukin-12 to induce IFNG synthesis from T-helper 1 (Th1) cells (PubMed:10653850).