

For Research Use Only

# IL-1 beta Polyclonal antibody

Catalog Number: 16806-1-AP

Featured Product

871 Publications



## Basic Information

### Catalog Number:

16806-1-AP

### Size:

150ul, Concentration: 700 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG10295

### GenBank Accession Number:

BC008678

### GeneID (NCBI):

3553

### ENSEMBL Gene ID:

ENSG00000125538

### UNIPROT ID:

P01584

### Full Name:

interleukin 1, beta

### Calculated MW:

269 aa, 31 kDa

### Observed MW:

30-35 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB: 1:2000-1:10000

IHC: 1:50-1:500

IF/ICC: 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IF/ICC, ELISA

### Cited Applications:

WB, IHC, IF, ELISA

### Species Specificity:

human

### Cited Species:

human, pig, rabbit, canine, zebrafish, bovine, sheep, duck

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

**WB**: LPS and Protein transport inhibitor treated THP-1 cells, human adrenal gland tissue, A431 cells

**IHC**: human tonsillitis tissue, human kidney tissue

**IF/ICC**: LPS treated THP-1 cells,

## Background Information

Interleukin-1 is a pro-inflammatory cytokine with multiple biological effects. The IL-1 gene family encodes three proteins: IL-1 $\alpha$ , IL-1 $\beta$  and their naturally occurring inhibitor IL-1RN. IL-1 Beta(IL-1 $\beta$ ), mainly produced by blood monocytes and tissue macrophages, has been implicated in mediating both acute and chronic inflammation. IL-1 $\beta$  is known to be involved in a variety of cellular activities, including cell proliferation, differentiation and apoptosis. IL-1 $\beta$  is emerging as a key mediator of carcinogenesis that characterizes host-environment interactions. Human IL-1 $\beta$  is synthesized as a 31 kDa precursor. To gain activity, the precursor must be cleaved by caspase-1 between Asp116 and Ala117 to yield a 17 kDa mature form.

## Notable Publications

Author	Pubmed ID	Journal	Application
Yangfei Yi	36178080	Orthop Surg	WB
JiangFan Yu	36248980	Front Oncol	WB
Chuyue Zhang	30272163	Hum Reprod	WB

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

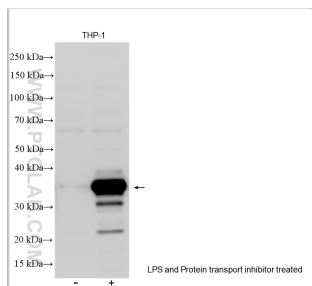
For technical support and original validation data for this product please contact:

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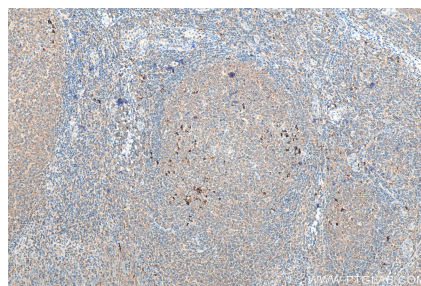
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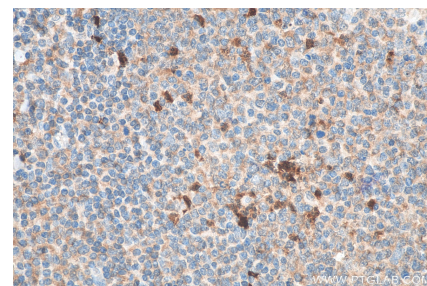
## Selected Validation Data



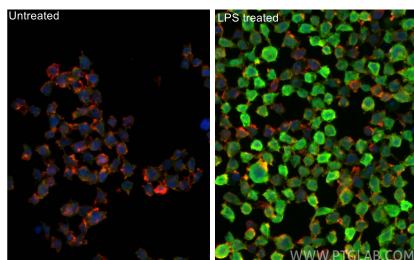
Non-treated THP-1 cells, THP-1 cells (treated with 100 ng/ml LPS for 3h, then added 300 ng/ml protein transport inhibitor for 3h) were subjected to SDS PAGE followed by western blot with 16806-1-AP (IL-1 Beta antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 16806-1-AP (IL-1 Beta antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 16806-1-AP (IL-1 Beta antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed LPS treated THP-1 cells using IL-1 beta antibody (16806-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-phalloidin (red).