

## IL-1 Beta Monoclonal antibody

Catalog Number: 66737-1-Ig

Featured Product

66 Publications

## Basic Information

## Catalog Number:

66737-1-Ig

## Size:

2000 µg/ml

## Source:

Mouse

## Isotype:

IgG1

## Immunogen Catalog Number:

AG26030

## 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:

35 kDa

## Purification Method:

Protein A purification

## CloneNo.:

2A1B4

## Recommended Dilutions:

WB 1:1000-1:6000

IHC 1:50-1:500

## Applications

## Tested Applications:

FC, IHC, WB, ELISA

## Cited Applications:

Cell treatment, ELISA, IF, IHC, IP, WB

## Species Specificity:

Human

## Cited Species:

human, bovine

**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 : A431 cells, U-87 MG cells

IHC : human lung cancer tissue, human skin cancer tissue

## 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
Jinghong Zhong	36177510	J Biochem Mol Toxicol	Cell treatment
Yingying Wang	36174863	Int J Biol Macromol	WB
Yuan Gao	34630116	Front Pharmacol	WB,ELISA

## Storage

## Storage:

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

## Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

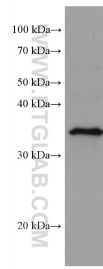
For technical support and original validation data for this product please contact:

T: 4006900926

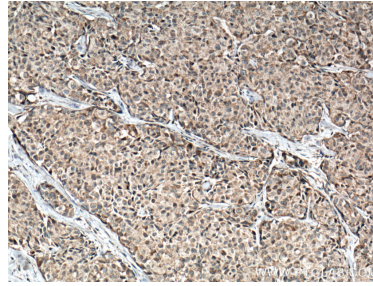
E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)W: [ptgcn.com](http://ptgcn.com)

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

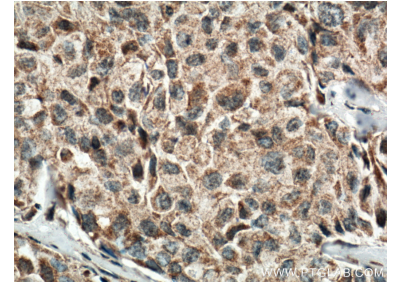
## Selected Validation Data



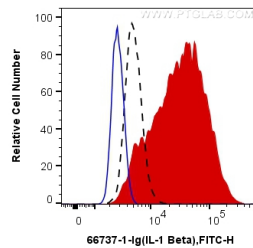
A431 cells were subjected to SDS PAGE followed by western blot with 66737-1-Ig (IL-1 Beta antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 66737-1-Ig (IL1 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 lung cancer tissue slide using 66737-1-Ig (IL1 beta antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1X10<sup>6</sup> THP-1 cells untreated (dashed lines), LPS treated (red) were intracellularly stained with 0.4 ug Anti-Human IL-1 Beta (66737-1-Ig, Clone:2A1B4) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000, or 0.4 ug Control Antibody (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).