

For Research Use Only

# Mouse IL-1 alpha Recombinant antibody, PBS Only (Capture)

Catalog Number: 83644-1-PBS



## Basic Information

Catalog Number:

83644-1-PBS

Size:

100ug, Concentration: 1 mg/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

GenBank Accession Number:

NM\_010554

GeneID (NCBI):

16175

UNIPROT ID:

P01582

Full Name:

interleukin 1 alpha

Calculated MW:

31kd

Observed MW:

31 kDa

Purification Method:

Protein A purification

CloneNo.:

240431B5

## Applications

Tested Applications:

WB, IF/ICC, Cytometric bead array, Indirect ELISA

Species Specificity:

mouse

## Product Information

83644-1-PBS targets IL-1 alpha as part of a matched antibody pair:

MP00634-2: 83644-1-PBS capture and 83644-2-PBS detection (validated in Cytometric bead array)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

## Background Information

Interleukin-1 $\alpha$  (IL-1 Alpha) is a protein that plays a crucial role in the regulation of a number of key cellular processes. IL-1 Alpha is a cytokine and a potent mediator of body's response to inflammation, microbial invasion, tissue injury and immunological response. In addition, recent studies suggest that IL-1 Alpha also has a role in wound healing, rheumatoid arthritis, Alzheimer's disease and tumor growth. IL-1 Alpha functions as an alarmin during the process of sterile inflammation. It serves as a signal from dying cells to potentiate the inflammatory response, increasing the expression of other secreted factors like IL-6 and IL-8. IL-1 Alpha was found to affect the cell cycle of osteosarcoma cell to reduce cell growth. IL-1 Alpha is initially translated as approximately 30-kD polypeptides that are processed to approximately 17.5-kD polypeptides prior to, or during, release from macrophages.

## Storage

Storage:

Store at -80°C.

Storage Buffer:

PBS Only

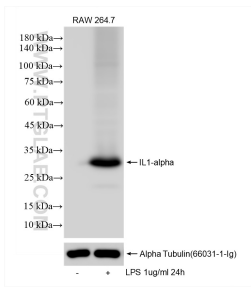
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

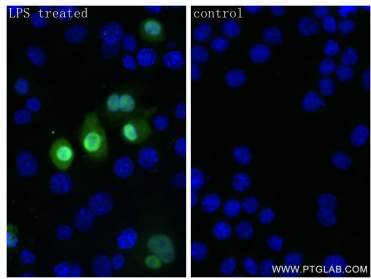
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

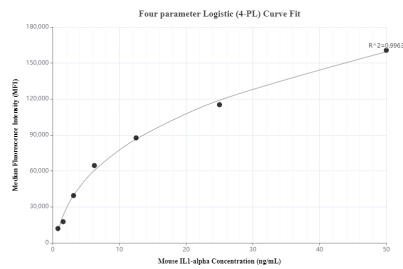
## Selected Validation Data



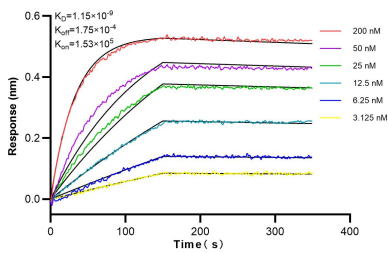
Untreated and LPS treated RAW 264.7 cells were subjected to SDS PAGE followed by western blot with 83644-1-RR (IL-1alpha antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83644-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed LPS treated RAW 264.7 cells using IL-1alpha antibody (83644-1-RR, Clone: 240431B5 ) at dilution of 1:250 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 83644-1-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP00634-2, MOUSE IL-1 alpha Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83644-1-PBS. Detection antibody: 83644-2-PBS. Standard: Eg0263. Range: 0.78-50 ng/mL.



Biolayer interferometry (BLI) kinetic assays of 83644-1-RR against Mouse IL-1alpha were performed. The affinity constant is 1.15 nM.