

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	GenBank Accession Number: NM_010554	Purification Method: Protein A purification
Size: 100ug , Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 16175	CloneNo.: 240431B5
Source: Rabbit	UNIPROT ID: P01582	
Isotype: IgG	Full Name: interleukin 1 alpha	
	Calculated MW: 31kd	
	Observed MW: 31 kDa	

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 α (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

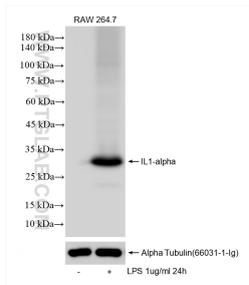
Storage:
Store at -80°C.

Storage Buffer:
PBS Only

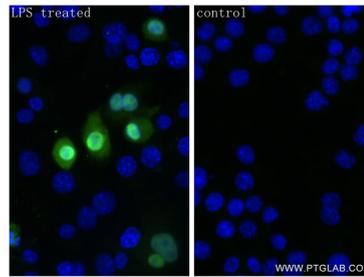
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

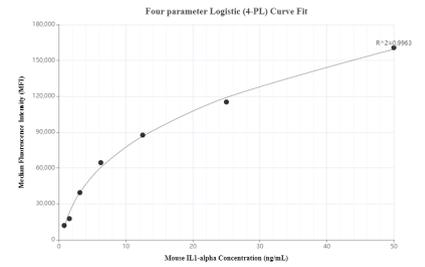
Selected Validation Data



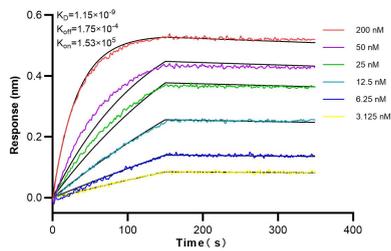
Untreated and LPS treated RAW 264.7 cells were subjected to SDS PAGE followed by western blot with 83644-1-RR (IL-1alpha antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83644-1-PBS in a different storage buffer formulation.



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.