For Research Use Only

IL-1 alpha Recombinant antibody

Catalog Number:83644-1-RR



Basic Information

Catalog Number: GenBank Accession Number:

83644-1-RR NM 010554 GeneID (NCBI): Size:

100ul, Concentration: 1000 ug/ml by 16175 Nanodrop:

UNIPROT ID: Source: P01582 Rabbit Full Name:

Isotype: interleukin 1 alpha IgG Calculated MW:

31kd

Observed MW: 31 kDa

Purification Method: Protein A purification

CloneNo.: 240431B5

Recommended Dilutions: WB 1:1000-1:4000 IF/ICC 1:125-1:500

Applications

Tested Applications: Positive Controls: WB, IF/ICC, ELISA WB: RAW 264.7 cells,

Species Specificity: IF/ICC: LPS treated RAW 264.7 cells, mouse

Background Information

Interleukin-1a (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 -20°C. Stable for one year after shipment.

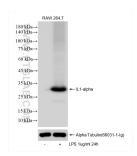
Storage Buffer:

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

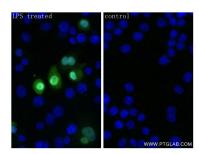
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

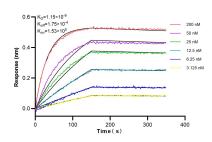
Selected Validation Data



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.



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).



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