

IL-1 Alpha Propeptide Rabbit pAb

IL-1 Alpha Propeptide Rabbit pAb Catalog # AP93939

Specification

IL-1 Alpha Propeptide Rabbit pAb - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW Physical State **Purity** WB, IHC-P, IHC-F, IF, E <u>P01582</u> Mouse Rabbit Polyclonal 31023 Lyophilized

This product was prepared from monospecific antiserum by immunoaffinity chromatography using antigens coupled to agarose beads followed by solid phase adsorption(s) to remove any unwanted reactivities. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Rabbit Serum, Mouse IgG and Mouse Serum. Specificity was confirmed by ELISA at less than 1% cross reactivity against other mouse heavy or light chain isotypes.

Buffer

0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

IL-1 Alpha Propeptide Rabbit pAb - Additional Information

Gene ID 16175

Other Names Interleukin-1 alpha, IL-1 alpha, Il1a {ECO:0000312|MGI:MGI:96542}

Dilution WB~~1:1000<br \>IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>E~~N/A

Format 0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

IL-1 Alpha Propeptide Rabbit pAb - Protein Information

Name II1a {ECO:0000312|MGI:MGI:96542}

Function



Cytokine constitutively present intracellularly in nearly all resting non-hematopoietic cells that plays an important role in inflammation and bridges the innate and adaptive immune systems (PubMed:16256210). After binding to its receptor IL1R1 together with its accessory protein IL1RAP, forms the high affinity interleukin-1 receptor complex. Signaling involves the recruitment of adapter molecules such as MYD88, IRAK1 or IRAK4. In turn, mediates the activation of NF-kappa-B and the three MAPK pathways p38, p42/p44 and JNK pathways (PubMed:1386364). Within the cell, acts as an alarmin and cell death results in its liberation in the extracellular space after disruption of the cell membrane to induce inflammation and alert the host to injury or damage. In addition to its role as a danger signal, which occurs when the cytokine is passively released by cell necrosis, directly senses DNA damage and acts as a signal for genotoxic stress without loss of cell integrity (By similarity).

Cellular Location

Nucleus {ECO:0000250|UniProtKB:P01583}. Cytoplasm {ECO:0000250|UniProtKB:P01583}. Secreted {ECO:0000250|UniProtKB:P01583}. Note=The lack of a specific hydrophobic segment in the precursor sequence suggests that IL-1 is released by damaged cells or is secreted by a mechanism differing from that used for other secretory proteins. The secretion is dependent on protein unfolding and facilitated by the cargo receptor TMED10; it results in protein translocation from the cytoplasm into the ERGIC (endoplasmic reticulum-Golgi intermediate compartment) followed by vesicle entry and secretion. Recruited to DNA damage sites and secreted after genotoxic stress. {ECO:000250|UniProtKB:P01583}

IL-1 Alpha Propeptide Rabbit pAb - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- IL-1 Alpha Propeptide Rabbit pAb Images



Tissue/cell: human pneumonia tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous



peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Incubation: Anti-IL-1 Alpha Polyclonal Antibody, Unconjugated(AP93939) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: human lung carcinoma;4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Incubation: Anti-IL-1 Alpha Polyclonal Antibody, Unconjugated(AP93939) 1:200, overnight at 4°C; The secondary antibody was Goat Anti-Rabbit IgG, Cy3 conjugated(bs-0295G-Cy3)used at 1:200 dilution for 40 minutes at 37°C. DAPI(5ug/ml,blue,C-0033) was used to stain the cell nuclei



Sample: Raw264.7(Mouse) Cell Lysate at 30 ug Primary: Anti-IL-1 Alpha Propeptide (AP93939) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 12/31 kD Observed band size: 31 kD





Sample: Raw264.7-LPS(Mouse) Cell Lysate at 10 ng Raw264.7-LPS(Mouse) Cell Lysate at 100 ng Raw264.7-LPS(Mouse) Cell Lysate at 1 ug Primary: Anti-IL-1 Alpha Propeptide (AP93939) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 12/31 kD Observed band size: 31 kD



Blank control: Raw264.7. Primary Antibody (green line): Rabbit Anti-IL-1 Alpha Propeptide antibody (AP93939) Dilution: $1 \mu g / 10^{6}$ cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody : Goat anti-rabbit IgG-AF647 Dilution: $1 \mu g / \text{test.}$ Protocol The cells were fixed with 4% PFA (10min at room temperature) and then permeabilized with 0.1% PBST for 20 min at room temperature. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

IL-1 Alpha Propeptide Rabbit pAb - Background

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.