

## IL-1 $\alpha$ Monoclonal Antibody

<b>Catalog No :</b>	YM0368
<b>Reactivity :</b>	Human
<b>Applications :</b>	WB;ELISA
<b>Target :</b>	IL-1 $\alpha$
<b>Fields :</b>	>>MAPK signaling pathway;>>Cytokine-cytokine receptor interaction;>>Necroptosis;>>Cellular senescence;>>Osteoclast differentiation;>>Hematopoietic cell lineage;>>Non-alcoholic fatty liver disease;>>AGE-RAGE signaling pathway in diabetic complications;>>Type I diabetes mellitus;>>Alzheimer disease;>>Prion disease;>>Pathways of neurodegeneration - multiple diseases;>>Pertussis;>>Leishmaniasis;>>Tuberculosis;>>Measles;>>Influenza A;>>Inflammatory bowel disease;>>Rheumatoid arthritis;>>Graft-versus-host disease;>>Fluid shear stress and atherosclerosis
<b>Gene Name :</b>	IL1A
<b>Protein Name :</b>	Interleukin-1 alpha
<b>Human Gene Id :</b>	3552
<b>Human Swiss Prot No :</b>	P01583
<b>Mouse Swiss Prot No :</b>	P01582
<b>Immunogen :</b>	Purified recombinant fragment of human IL-1 $\alpha$ expressed in E. Coli.
<b>Specificity :</b>	IL-1 $\alpha$ Monoclonal Antibody detects endogenous levels of IL-1 $\alpha$ protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Monoclonal, Mouse
<b>Dilution :</b>	WB 1:500 - 1:2000. ELISA: 1:10000. Not yet tested in other applications.  Affinity purification

**Storage Stability :** -15°C to -25°C/1 year (Do not lower than -25°C)

**Molecular weight :** 31kD

**Cell Pathway :** MAPK\_ERK\_Growth;MAPK\_G\_Protein;Cytokine-cytokine receptor interaction;Apoptosis\_Inhibition;Apoptosis\_Mitochondrial;Apoptosis\_Overview;Hematopoietic cell lineage;Type I diabetes mellitus;Prion diseases

**P References :**  
1. Du, Y.; et al. 2000. Neurology 55: 480-484.  
2. Grimaldi, L. et al. Ann. Neurol. 47: 361-365, 2000.

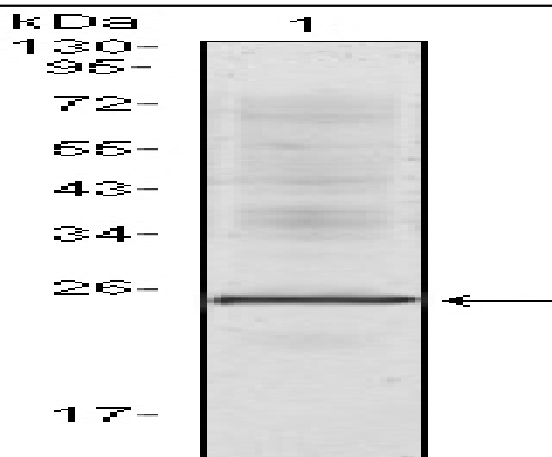
**Background :** The protein encoded by this gene is a member of the interleukin 1 cytokine family. This cytokine is a pleiotropic cytokine involved in various immune responses, inflammatory processes, and hematopoiesis. This cytokine is produced by monocytes and macrophages as a proprotein, which is proteolytically processed and released in response to cell injury, and thus induces apoptosis. This gene and eight other interleukin 1 family genes form a cytokine gene cluster on chromosome 2. It has been suggested that the polymorphism of these genes is associated with rheumatoid arthritis and Alzheimer's disease. [provided by RefSeq, Jul 2008],

**Function :** domain: The similarity among the IL-1 precursors suggests that the amino ends of these proteins serve some as yet undefined function., function: Produced by activated macrophages, IL-1 stimulates thymocyte proliferation by inducing IL-2 release, B-cell maturation and proliferation, and fibroblast growth factor activity. IL-1 proteins are involved in the inflammatory response, being identified as endogenous pyrogens, and are reported to stimulate the release of prostaglandin and collagenase from synovial cells., online information: Interleukin-1 entry, online information: The Singapore human mutation and polymorphism database, similarity: Belongs to the IL-1 family., subcellular location: 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., subunit: Mono

**Subcellular Location :** Cytoplasm . Secreted . 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 (PubMed:32272059).

**Expression :** Lung,

**Products Images**



Western Blot analysis using IL-1 $\alpha$  Monoclonal Antibody against truncated IL-1 $\alpha$  recombinant protein.