

Product datasheet for TA336742

OriGene Technologies, Inc.

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IL1 beta (IL1B) Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: ICC/IF, IHC, WB

Recommended Dilution: Immunocytochemistry/ Immunofluorescence, Immunohistochemistry-Paraffin: 1:50 - 1:200,

Western Blot: 1:500 - 1:1000, Immunohistochemistry: 1:50 - 1:200

Reactivity: Human, Mouse, Rat

Host: Rabbit

Clonality: Polyclonal

Immunogen: Synthetic peptide made to a C-terminal portion of the human IL 1 beta protein (between

amino acids 100-200) [UniProt P01584]

Formulation: PBS, 0.05% Sodium Azide. Store at 4C short term. Aliquot and store at -20C long term. Avoid

freeze-thaw cycles.

Concentration: lot specific

Purification: Immunogen affinity purified

Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Predicted Protein Size: 30 kDa

Gene Name: interleukin 1 beta

Database Link: NP 000567

Entrez Gene 16176 MouseEntrez Gene 24494 RatEntrez Gene 3553 Human

P01584





Background:

The protein encoded by this gene is a member of the interleukin 1 cytokine family. This cytokine is produced by activated macrophages as a proprotein, which is proteolytically processed to its active form by caspase 1 (CASP1/ICE). Two forms of interleukin-1, designated IL-1alpha and IL-1beta, have been described. Although encoded by distinct genes and exhibiting roughly only 25% sequence identity, IL-1alpha and IL-1beta bind to the same receptor and seem to elicit similar biological responses. This cytokine is an important mediator of the inflammatory response, and is involved in a variety of cellular activities, including cell proliferation, differentiation, and apoptosis. The induction of cyclooxygenase-2 (PTGS2/COX2) by this cytokine in the central nervous system (CNS) is found to contribute to inflammatory pain hypersensitivity. This gene and eight other interleukin 1 family genes form a cytokine gene cluster on chromosome 2. In T cells, IL-1 stimulates the production of IL-2 and selectively inhibits IL-4 expression and it induces B cell proliferation, maturation and immunoglobulin synthesis. NK cells require IL-1beta for production of the anti- pathogen IFN-gamma. IL-1 has also been implicated in several pathological conditions including rheumatoid arthritis, inflammatory bowel disease and atherosclerosis.

Synonyms: IL-1; IL1-BETA; IL1F2

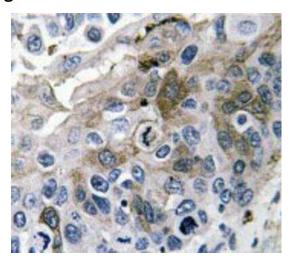
Protein Families: Druggable Genome, Secreted Protein

Protein Pathways: Alzheimer's disease, Apoptosis, Cytokine-cytokine receptor interaction, Cytosolic DNA-sensing

pathway, Graft-versus-host disease, Hematopoietic cell lineage, MAPK signaling pathway, NOD-like receptor signaling pathway, Prion diseases, Toll-like receptor signaling pathway,

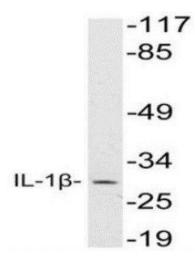
Type I diabetes mellitus

Product images:



Immunohistochemistry: IL-1 beta/IL-1F2 Antibody TA336742 - Staining in the cytoplasm of villi and in the crypt cells of human lung carcinoma tissue.





Western Blot: IL-1 beta/IL-1F2 Antibody TA336742 - Analysis of IL1 beta Antibody in extracts from HeLa cells.