

Human IL-1 beta (recombinant)



Alias: IL-1F2 **Catalog #:** 6575

Size: 5 ug **Research Use Only**

Molecular Weight: 17.4 kDa

Source: Yeast. Recombinant Human IL-1 beta was produced in yeast and, therefore, does not have endotoxin. It is naturally folded and post-translationally modified.

Formulation: Lyophilized without carrier protein.

Purity: >95% as visualized by SDS-PAGE analysis.

Purification: Ion-exchange chromatography.

Bioactivity: In testing.

Entrez Gene ID: 3553

Number of Amino Acids: 153

Amino Acid Sequence: APVRSLNCTL RDSQQKSLVM SGPYELKALH LQQDMEQQV VFSMSFVQGE ESNDKIPVAL
GLKEKNLYLS CVLKDDKPTL QLESVDPKNY PKKKMEKRFV FNKIEINNKL EFESAQFPNW
YISTSQAENM PVFLGGTKGG QDITDFTMQF VSS (153)

Country of Origin: USA

Reconstitution: Reconstitute with sterile phosphate-buffered saline containing at least 0.1% carrier protein.

Stability and Storage: Stable for up to twelve months from date of receipt at -20°C. Stable for at least 3 months when stored in working aliquots with a carrier protein at -20°C. Avoid repeated freeze/thaw cycles.

Applications: The Human IL-1 beta protein can be used in cell culture, as an IL-1 beta ELISA Standard, and as a Western Blot Control.

Background: The IL-1 family of cytokines encompasses eleven proteins that each share a similar β -barrel structure and bind to Ig-like receptors. Several of the well characterized members of the IL-1-like cytokines play key roles in the development and regulation of inflammation. IL-1 α (IL-1F1), IL-1 β (IL-1F2), and IL-18 (IL-1F4) are well-known inflammatory cytokines active in the initiation of the inflammatory reaction and in driving Th1 and Th17 inflammatory responses. In contrast, IL-1 receptor antagonist (IL-1ra; IL-1F3) and IL-36 receptor antagonist (IL-36ra; IL-1F5) reduce inflammation by blocking the binding of the agonist receptor ligands. IL-33 (IL-1F11) is thought to function as an 'alarmin' released following cell necrosis to alerting the immune system to tissue damage or stress. The biological properties of IL-37 (IL-1F7) are mainly those of down-regulating inflammation.

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