Proteins



Product Data Sheet

IL-1 beta Protein, Rat (His)

Cat. No.: HY-P7097A

Synonyms: rRtIL-1β; Catabolin; IL1F2; IL-1 beta; IL1B

Species: Source: E. coli

Accession: Q5BKB0 (V117-S268)

Gene ID: 24494

Molecular Weight: Approximately 19 kDa

PROPERTIES

AA Sequence	VPIRQLHCRL RDEQQKCLVL SDPCELKALH LNGQNISQQV VFSMSFVQGE TSNDKIPVAL GLKGKNLYLS CVMKDGTPTL QLESVDPKQY PKKKMEKRFV FNKIEVKTKV EFESAQFPNW YISTSQAEHR PVFLGNSNGR DIVDFTMEPV SS
Biological Activity	Measured in a cell proliferation assay using D10.G4.1 mouse helper T cells. The ED $_{50}$ for this effect is 3.285 ng/mL, corresponding to a specific activity is 3.044×10^5 units/mg.
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 μm filtered solution of PBS, 300 mM NaCl, pH 7.4.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μ g/mL in ddH ₂ O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.

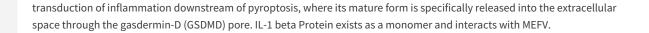
Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Shipping

Background

IL-1 beta Protein is a potent pro-inflammatory cytokine initially discovered as a major endogenous pyrogen. It induces various inflammatory responses, including prostaglandin synthesis, neutrophil activation, T-cell activation and cytokine production, B-cell activation and antibody production, and fibroblast proliferation and collagen production. It also promotes Th17 differentiation of T-cells and synergizes with IL12 to induce IFNG synthesis from Th1 cells. IL-1 beta Protein plays a role in angiogenesis by inducing VEGF production in synergy with TNF and IL6. Additionally, it is involved in the



REFERENCES

[1]. Stapp JM, et al. Recombinant rat IL-1beta and IL-6 synergistically enhance C3 mRNA levels and complementcomponent C3 secretion by H-35 rat hepatoma cells. Cytokine. 2005 Apr 21;30(2):78-85.

Caution: Product has not been fully validated for medical applications. For research use only.

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