

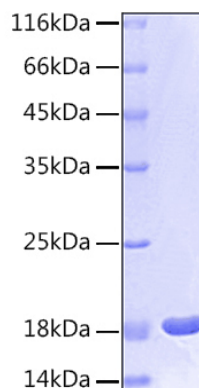


Product name:	Recombinant Human IL-1 beta Protein
Cat number:	GRF00002
Size:	20 ug
Molecular Weight:	18.22 kDa
Purification:	≥ 95 % as determined by SDS-PAGE; ≥ 95 % as determined by HPLC.
Form:	lyophilized
Storage:	Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt. After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.
Synonyms:	IL-1; IL1-BETA; IL1F2; IL1 beta; IL1B
Source:	E. coli
Bio-Activity:	1. Measured in a cell proliferation assay using D10.G4.1 mouse helper T cells. The ED 50 for this effect is 6.04-24.16 pg/mL, corresponding to a specific activity of 4.14×10^7 ~ 1.66×10^8 units/mg. 2. Measured by its binding ability in a functional ELISA. Immobilized Human IL-1 beta (Catalog: RP00002) at 10 µg/mL (100 µL/well) can bind Biotinylated Human IL-1R1 (Catalog: RP01036) with a linear range of 0.002-1 µg/mL.
Endotoxin:	< 0.1 EU/µg of the protein by LAL method.
Formulation:	Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4. Contact us for customized product form or formulation.
Reconstitution:	Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.
Tags:	C-His
Description:	High quality, high purity and low endotoxin recombinant Recombinant Human IL-1 beta Protein (RP00002), tested reactivity in E. coli and has been validated in SDS-PAGE. 100% guaranteed.
Background:	Interleukin-1 beta (IL1 beta or IL1B) also known as catabolin, 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). 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.

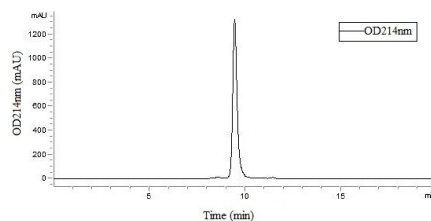
For Research Use Only

IMMUNOLOGICAL SCIENCES

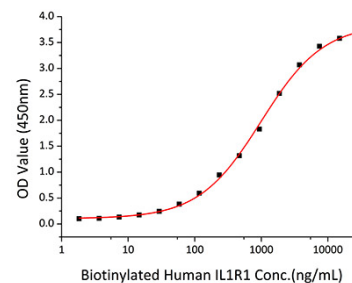
Web-site: <https://immunologicalsciences.com> - E-mail: info@immunologicalsciences.com



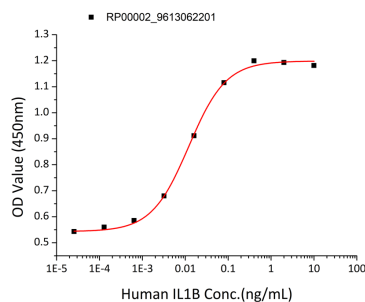
Recombinant Human IL-1 beta Protein is greater than 95% as determined by SEC-HPLC.



Recombinant Human IL-1 beta Protein is greater than 95% as determined by SEC-HPLC.



Recombinant Human IL-1 beta promotes the proliferation of D10.G4.1 mouse helper T cells. The ED50 for this effect is 6.04-24.16 pg/mL, corresponding to a specific activity of 4.14×10^7 ~ 1.66×10^8 units/mg.



Recombinant Human IL-1 beta Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.

For Research Use Only
IMMUNOLOGICAL SCIENCES

Web-site: <https://immunologicalsciences.com> - E-mail: info@immunologicalsciences.com