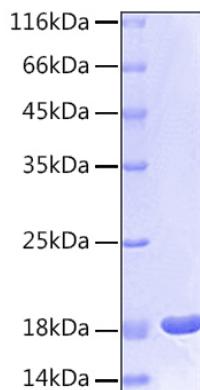


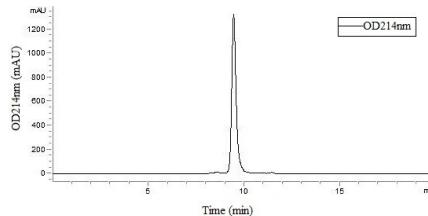
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<b>Product name:</b>	Recombinant Human IL-1 beta Protein
<b>Cat number:</b>	GRF00002
<b>Size:</b>	20 ug
<b>Molecular Weight:</b>	18.22 kDa
<b>Purification:</b>	≥ 95 % as determined by SDS-PAGE;≥ 95 % as determined by HPLC.
<b>Form:</b>	lyophilized
<b>Storage:</b>	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.
<b>Synonyms:</b>	IL-1;IL1-BETA;IL1F2;IL1 beta;IL1B
<b>Source:</b>	E. coli
<b>Bio-Activity:</b>	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 $4.14 \times 10^7$ ~ $1.66 \times 10^8$ units/mg. 2. Measured by its binding ability in a functional ELISA. Immobilized Human IL-1 beta (Catalog: RP00002) at 10 $\mu$ g/mL (100 $\mu$ L/well) can bind Biotinylated Human IL-1R1 (Catalog: RP01036) with a linear range of 0.002-1 $\mu$ g/mL.
<b>Endotoxin:</b>	< 0.1 EU/ $\mu$ g of the protein by LAL method.
<b>Formulation:</b>	Lyophilized from a 0.22 $\mu$ m filtered solution of PBS, pH 7.4. Contact us for customized product form or formulation.
<b>Reconstitution:</b>	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.
<b>Tags:</b>	C-His
<b>Description:</b>	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.
<b>Background:</b>	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.

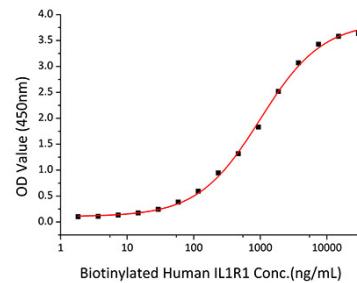
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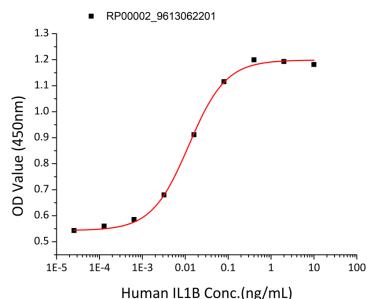
Recombinant Human IL-1 beta Protein is greater than 95% as determined by SEC-HPLC.



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  $4.14 \times 10^7$ – $1.66 \times 10^8$  units/mg.



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

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