

Recombinant Human IL-1 beta Protein

RPCB0137

Description

This high-purity Recombinant Human IL-1 beta Protein is supplied as a kit for advanced applications. The kit includes Bradford Reagent to quantify total protein concentration for accurate sample normalization (Optional).

Protein Information

SKU:	RPCB0137
Contents:	10 µg, 20 µg, 50 µg, 100 µg Bradford Reagent: 1 vial (2ml)
Synonyms:	IL-1, IL1-BETA, IL1F2, IL1 beta, IL1B
Species:	Human
Gene ID:	3553
Expression Host:	E. coli
Tags:	C-His
Calculated MW:	18.22 kDa
Observed MW:	18 kDa
Purification:	≥ 95 % as determined by SDS-PAGE, ≥ 95 % as determined by HPLC.
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.
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 $4.14 \times 10^7 \sim 1.66 \times 10^8$ units/mg.

Manufacturers Statement - This final kit system is assembled and quality-released by Assay Genie Limited

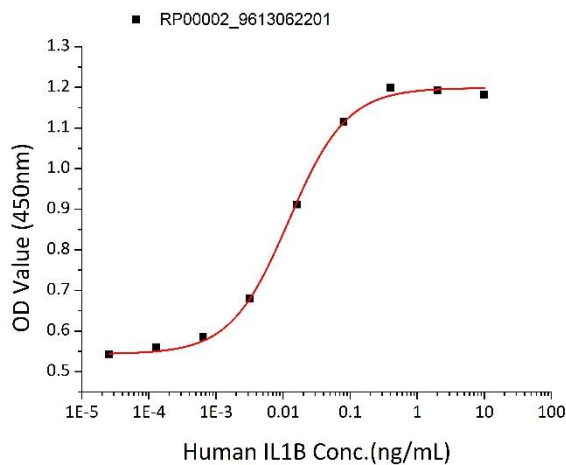
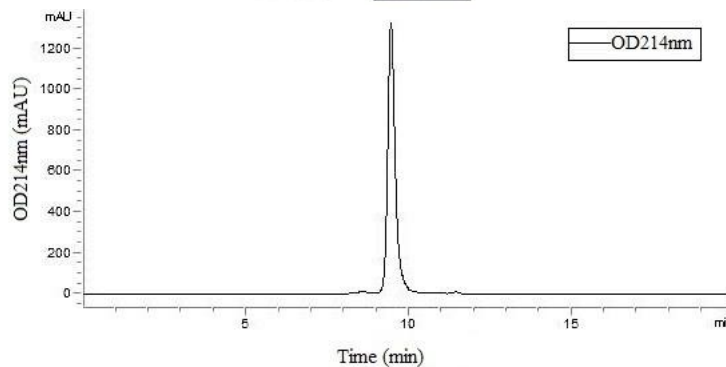
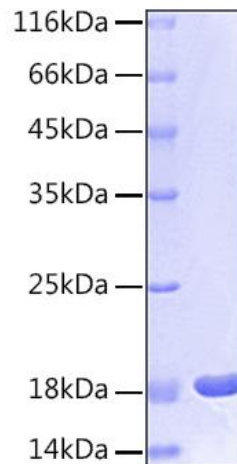
2. Measured by its binding ability in a functional ELISA. Immobilized Human IL-1 beta (RPCB0137) at 10 µg/mL (100 µL/well) can bind Biotinylated Human IL-1R1 (RPCB0850) with a linear range of 0.002-1 µg/mL.

Preparation & Storage

- Shipping:** The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
- 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.
Store Bradford Reagent at Room Temperature for 1 Year.
- 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.
- Protein Quantification (Optional):** To quantify total protein levels, use the Bradford Reagent included in this kit. Visit <https://www.assaygenie.com/bradford-protein-assay-protocol/> to view the full protocol.

Validation Data

Image



Description

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

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