



Recombinant Human IL-1 β protein

E13-003

Catalog Number:	E13-003-1, E13-003-2
Amount:	10 μ g, 50 μ g
Product description:	Recombinant full length Human IL-1 β MW=17 kDa. The recombinant protein was purified by Ni-NTA and followed gel filtration chromatography. Purity>95% by SDS PAGE and Coomassie blue stain (Figure A) The recombinant protein was active in ELISA assay with an EC50 of about 5nM (Figure B) and the measure MW in LC-MS was 17422 Dalton, in agreeing with its theoretic molecular weight (Figure C).
Background:	IL1 is a name that designates two pleiotropic cytokines, IL-1 α (IL1-F1) and IL-1 β (IL-1F2), which are the products of distinct genes. IL-1 α and IL-1 β are structurally related polypeptides that share approximately 21% amino acid (aa) identity in human. Both proteins are produced by a wide variety of cells in response to inflammatory agents, infections, or microbial endotoxins. While IL-1 α and IL-1 β are regulated independently, they bind to the same receptor and exert identical biological effects.
GenBank accession number:	NP_000567
Amino acid sequence:	GAPVRSLNCTLRDSQQKSLVMSGPYELKALHLQGQDMEQQVVFSSMSFVQGEESNDKIPVAL GLKEKNLYLSCVLKDDKPTLQLESVDPKNYPKKKMEKRFVFNKIEINNKLFEFESAQFPNWWYIS TSQAENMPVFLGGTKGGQDITDFTMQFVSS
Activity:	ELISA to measure IL-1 binding activity (Figure B). IL-1 was immobilized on the plate and was detected by anti IL-1 β antibody (Abcam ab2105).
Formulation:	Lyophilized from a 0.22 μ m filtered solution at a concentration of 1mg/ml in 100mM Tris-HCl, pH8.0, 100mM NaCl, 1mM DTT.
Reconstitution:	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water to a concentration of 1.0 mg/ml.
Shipping&Stability:	The Product is shipped at ambient temperature. Upon reconstitution, the preparation is stable for up to 1 month at 2-8 $^{\circ}$ C. For long term storage, apportion the reconstituted preparation into working aliquots and store at -20 $^{\circ}$ C to -70 $^{\circ}$ C. Avoid repeated freeze/thaw cycles.

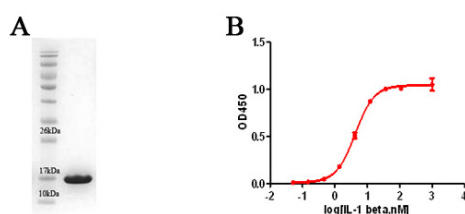


Figure A. The purity of recombinant protein IL-1 β (E13-003). 15 % SDS-PAGE, 2.4 μ g protein.

Figure B. ELISA to measure the activity of IL-1 β (E13-003)

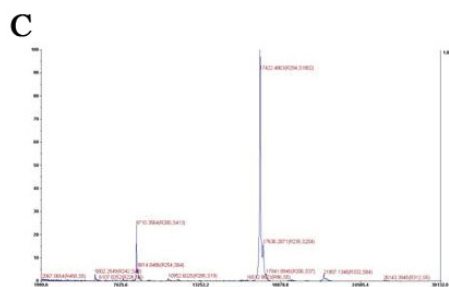


Figure C. The molecular weight of IL-1 β was 17422 Dalton in LC-MS spectrum analysis, consistent with its calculated MW of 17433.

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