

Recombinant Human IL-1 beta Protein

Product Information

Product Name	Cat#	Size
Recombinant Human IL-1 beta Protein	90101ES10	10 µg
	90101ES60	100 µg
	90101ES76	500 µg

Product Description

Interleukin-1 beta (IL-1β) is a pro inflammatory cytokine, which is secreted by immune cells to trigger inflammation and this has been found profoundly in the lesions caused by Leishmania pathogens. IL-1 is a name that designates two pleiotropic cytokines, IL-1 alpha (IL-1F1) and IL-1 beta (IL-1F2), which are the products of distinct genes. IL-1 alpha and IL-1 beta are structurally related polypeptides that share approximately 21% amino acid (aa) identity in human. Both IL-1α and IL-1β binds to the same receptor and has similar but not identical biological properties; The mature human IL1β shares 96% amino acid sequence identity with rhesus and 67% -78% with canine, mouse and rat IL-1β. IL-1β, are known to modulate effects of neurotoxic neurotransmitters discharged during excitation or inflammation in the central nervous system (CNS).

Product Properties

Synonyms	Interleukin-1 beta, IL-1β, IL-1, IL1B, IL-1b, IL1-BETA, IL-1F2, IL1F2IL-1 beta, interleukin-1 beta, preinterleukin 1 beta, pro-interleukin-1-beta.
Accession	P01584
GeneID	3553
Source	E.coli-derived human IL-1β protein, Ala117-Ser269.
Molecular Weight	Approximately 17.3 kDa.
AA Sequence	APVRSLNCTL RDSQQKSLVM SGPYELKALH LQGQDMEQQV VFSMSFVQGE ESNDKIPVAL GLKEKNLYLS CVLKDDKPTL QLESVDPKNY PKKKMEKRFV FNKIEINNKL EFESAQFPNW YISTSQAENM PVFLGGTKGG QDITDFTMQF VSS
Tag	None
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Purity	> 97% by SDS-PAGE and HPLC analyses.
Biological Activity	The ED ₅₀ as determined by a cell proliferation assay using murine D10S cells is less than 1.0 pg/mL, corresponding to a specific activity of > 1.0 × 10 ⁹ IU/mg. Fully biologically active when compared to standard.
Endotoxin	< 1.0 EU per 1µg of the protein by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4. We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom.
Reconstitution	Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20°C. Further dilutions should be made in appropriate buffered solutions.

Shipping and Storage

The products are shipped with ice pack and can be stored at $-20\text{ }^{\circ}\text{C}$ for 1 year.

1 month, $2\text{ to }8\text{ }^{\circ}\text{C}$ under sterile conditions after reconstitution.

3 months, $-20\text{ }^{\circ}\text{C}$ under sterile conditions after reconstitution.

Recommend to aliquot the protein into smaller quantities when first used and avoid repeated freeze-thaw cycles.

Cautions

1. Avoid repeated freeze-thaw cycles.
2. For your safety and health, please wear lab coats and disposable gloves for operation.
3. For research use only!