

Recombinant Rat Interleukin-1 beta (Rat IL-1 β)

Product Information

| Product Name | Cat# | Size |
|--|-----------|-------------|
| | 90165ES10 | 10 μ g |
| Recombinant Rat Interleukin-1 beta (Rat IL-1 β) | 90165ES60 | 100 μ g |
| | 90165ES76 | 500 μ g |

Product Description

Interleukin-1 beta (IL-1 β) 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-1 α and IL-1 β binds to the same receptor and has similar but not identical biological properties. The mature human IL1 β shares 96% amino acid sequence identity with rhesus and 67% -78% with canine, mouse and rat IL-1 β . IL-1 β , are known to modulate effects of neurotoxic neurotransmitters discharged during excitation or inflammation in the central nervous system (CNS).

Product Properties

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|----------------------------|---|
| Synonyms | Interleukin-1 beta, IL-1 β , IL-1, IL1B, IL-1b, IL1-BETA, IL-1F2, IL1F2IL-1 beta, interleukin-1 beta, preinterleukin 1 beta, pro-interleukin-1-beta. |
| Accession | Q63264 |
| Unigene | Rn.9869. |
| Source | E.coli-derived rat IL-1 β protein, Val117-Ser268, with an N-terminal Met. |
| Molecular Weight | Approximately 17.3 kDa. |
| AA Sequence | MVPIRQLHCR LRDEQQKCLV LSDPCELKAL HLNGQNISQQ VVFSMSFVQG ETSNDKIPVA LGLKGLNLYL SCVMKDGTP T LQLESVDPKQ YPKKKMEKRF VFNKIEVKTK VEFESAQFPN WYISTSQAEH RPVFLGNSNG RDIVDFTMEP VSS |
| Tag | None |
| Physical Appearance | Sterile Filtered White lyophilized (freeze-dried) powder. |
| Purity | > 96% 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 0.1 ng/mL, corresponding to a specific activity of > 1.0 \times 10 ⁷ IU/mg. Fully biologically active when compared to standard. |
| Endotoxin | < 1.0 EU per 1 μ g of the protein by the LAL method. |
| Formulation | Lyophilized from a 0.2 μ m filtered concentrated solution in PBS, pH 7.4, with 5% trehalose, 0.02% Tween-20. 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 \leq -20 $^{\circ}$ 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 $^{\circ}$ C to -80 $^{\circ}$ C for 1 year.

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!