

Recombinant Equine Interleukin-1 beta

Information

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| Gene ID | 100034237 |
| Accession # | Q28386 |
| Alternate Names | IL-1 beta |
| Source | Escherichia coli. |
| M.Wt | Approximately 17.3 kDa, a single non-glycosylated polypeptide chain containing 153 amino acids. |
| AA Sequence | AAMHSVNCRL RDIYHKSLLV SGACELQAVH LNGENTNQV VFCMSFVQGE EETDKIPVAL GLKEKNLYLS CGMKDGGKPTL QLETVDPNY PKRKMEKRFV FNKMEIKGNV EFESAMYPNW YISTSQAEKS PVFLGNTRGG RDITDFIMEI TSA |
| Appearance | Sterile Filtered White lyophilized (freeze-dried) powder. |
| Stability & Storage | Use a manual defrost freezer and avoid repeated freeze-thaw cycles - 12 months from date of receipt, -20 to -70 °C as supplied - 1 month, 2 to 8 °C under sterile conditions after reconstitution - 3 months, -20 to -70 °C under sterile conditions after reconstitution |
| Formulation | Lyophilized from a 0.2 µm filtered concentrated solution in 1 × PBS, pH 7.4, 0.1 % Tween-80. |
| Reconstitution | We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. 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. |
| Biological Activity | Fully biologically active when compared to standard. The ED as determined by a cell proliferation assay using murine D10S cells is less than 20 pg/ml, corresponding to a specific activity of > 5.0 × 10 IU/mg. |
| Shipping Condition | Gel pack. |
| Handling | Centrifuge the vial prior to opening. |
| Usage | For Research Use Only! Not to be used in humans. |

Components and Storage

| Components | 10µg | 100µg | 500µg |
|---------------------------------------|------|-------|-------|
| Recombinant Equine Interleukin-1 beta | 10µg | 100µg | 500µg |

Use a manual defrost freezer and avoid repeated freeze-thaw cycles

- 12 months from date of receipt, -20 to -70 °C as supplied
- 1 month, 2 to 8 °C under sterile conditions after reconstitution
- 3 months, -20 to -70 °C under sterile conditions after reconstitution

Quality Control

| | |
|-----------|-------------------------------------------------------------------------|
| Purity | > 95 % by SDS-PAGE and HPLC analyses. |
| Endotoxin | Less than 1 EU/ μ g of rEqIL-1 β as determined by LAL method. |

Description

Interleukin-1 beta (IL-1 β) is a non-secreted proinflammatory cytokine produced mainly by activated macrophages, as well as neutrophils, epithelial cells, and endothelial cells. It possesses metabolic, physiological, haematopoietic activities, and plays one of the central roles in the regulation of the immune responses. Both IL-1 α and IL-1 β binds to the same receptor and has similar but not identical biological properties. Recombinant equine interleukin-1 beta is a 17 kDa protein containing 153 amino acid residues and it shares 63 %~70 % a.a. sequence identity with canine, cotton rat, porcine, feline, human, mouse, rat, and rhesus IL1 β .

Reference

1. Bankers-Fulbright, J.L., K.R. Kalli, and D.J. McKean. 1996. Life Sci, 59: 61-83
2. Dinarello, C.A. 1997. Semin Oncol, 24: S9-81-S9-93
3. Martinon, F., and J. Tschopp. 2007. Cell Death Differ, 14: 10-22
4. Auron, P.E., A.C. Webb, L.J. Rosenwasser, et al. 1984. Proc Natl Acad Sci U S A, 81: 7907-11.

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