

## Recombinant Mouse IL-1 beta Catalog No: C042

Description Recombinant Mouse Interleukin-1 beta is produced by our E.coli expression system and the target

gene encoding Val118-Ser269 is expressed.

Source E. coli

Alternative name Interleukin-1 Beta; IL-1 Beta; II1b

Accession No. P10749

Formulation Lyophilized from a 0.2 µm filtered solution of 50mM TrisHCl, 50mM NaCl, pH 8.0.

Quality Control Bioactivity\* Measured by the dose-dependent stimulation of mouse D10S cells.

ED50 is less than 0.01 ng/ml. Specific Activity of 1.0 x 10^8 IU/mg.

Purity: Greater than 95% as determined by reducing SDS-PAGE.

Endotoxin: Less than 0.1 ng/μg (1 IEU/μg).

**Shipping** The product is shipped at ambient temperature.

Upon receipt, store it immediately at the temperature listed below.

Storage Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks.

Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Amino Acid Sequence VPIRQLHYRLRDEQQKSLVLSDPYELKALHLNGQNINQQVIFSMSFVQGEPSNDKIPVALGLKGKNLY

LSCVMKDGTPTLQLES

VDPKQYPKKKMEKRFVFNKIEVKSKVEFESAEFPNWYISTSQAEHKPVFLGNNSGQDIIDFTMESVS

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**Background** 

Interleukin-1 (IL-1) designates two proteins, IL-1  $\alpha$  and IL-1  $\beta$ , which are the products of distinct genes, but recognize the same cell surface receptors. IL-1  $\alpha$  and IL-1  $\beta$  are structurally related polypeptides that show approximately 25% homology at the amino acid level. Both proteins are produced by a wide variety of cells in response to stimuli such as those produced by inflammatory agents, infections, or microbial endotoxins. The proteins are synthesized as 31 kDa precursors that are subsequently cleaved into proteins with molecular weights of approximately 17.5 kDa. The specific protease responsible for the processing of IL-1 $\beta$ , designated interleukin 1  $\beta$  -converting enzyme (ICE), has been described. Mature human and mouse IL-1  $\beta$  share approximately 75% amino acid sequence identity and human IL-1 $\beta$  has been found to be active on murine cell lines.

## SDS-PAGE



