Recombinant Mouse IL-1 beta/IL1B Protein

Catalog Number: PDEM100209

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

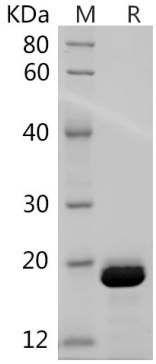
Description

Species	Mouse
Source	E.coli-derived Mouse IL-1 beta protein Val118-Ser269, with an N-terminal His
Calculated MW	17.4 kDa
Observed MW	16 kDa
Accession	P10749
Bio-activity	Not validated for activity

Properties

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin	< 10 EU/mg of the protein as determined by the LAL method
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

Data



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Background

Interleukin-1 (IL-1) designates two proteins, IL-1α and IL-1β, which are the products of distinct genes, but recognize the same cell surface receptors. IL-1α and IL-1β 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-1β, designated interleukin 1β-converting enzyme (ICE), has been described. Mature human and mouse IL-1β share approximately 75% amino acid sequence identity and human IL-1β has been found to be active on murine cell lines.