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Product Datasheet

Mouse IL1 beta protein, His tag (active), Unconjugated GTX00293-PRO

Article Name	Mouse IL1 beta protein, His tag (active), Unconjugated
Biozol Catalog Number	GTX00293-PRO
Supplier Catalog Number	GTX00293-pro
Alternative Catalog Number	GTX00293-PRO-10
Manufacturer	GeneTex
Category	Proteine/Peptide
Application	FA
Species Reactivity	Mouse
Conjugation	Unconjugated
NCBI	16176
UniProt	P10749
Buffer	Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose, ProClin 300.
Expression System	HEK293 cells
Form	Lyophilized powder
Sequence	N-terminal His-Tag, Val118~Ser269 (NP_032387.1)

Application Notes

IL-1beta (Interleukin-1 beta) is a proinflammatory and immunoregulatory cytokine involved in a variety of cellular activities. It has been elucidated that IL-1beta stimulation of cells activates MMP-9 (matrix metalloproteinases-9) secretion by the activation of the dual signalling pathways. Thus, a stimulation assay of IL-1beta was conducted using 3T3 cell line, and the MMP-9 activity was detected through gel zymography. Briefly, 1×10^6 3T3 cells were cultured overnight in 5% DMEM, washed with serum-free medium and then stimulated with different concentrations of IL-1beta for 20h, and cell lysates were collected to measure MMP-9 activity. Cell lysates samples were denatured by SDS loading buffer, electrophoresed through sodium dodecyl sulphate-polyacrylamide gel (SDS-PAGE, 10% gels) containing gelatin (1mg/mL) with nonreducing conditions. After renaturation, incubation and coomassie brilliant blue (CBB)-stained, MMPs hydrolyzed gelatin nearby, indicated by the white bands on the gel. Increased MMP-9 activity in 3T3 cells due to the stimulation of IL-1beta.