

## Mouse IL1 beta protein, His tag (active)

Cat. No. GTX00293-pro

**Applications** Functional Assay**Species** Mouse**Package**

10 µg

## Applications

## Application Note

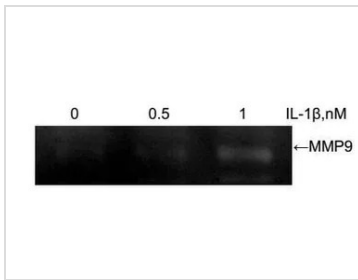
IL-1 $\beta$  (Interleukin-1 beta) is a proinflammatory and immunoregulatory cytokine involved in a variety of cellular activities. It has been elucidated that IL-1 $\beta$  stimulation of cells activates MMP-9 (matrix metalloproteinases-9) secretion by the activation of the dual signalling pathways. Thus, a stimulation assay of IL-1 $\beta$  was conducted using 3T3 cell line, and the MMP-9 activity was detected through gel zymography. Briefly,  $1 \times 10^6$  3T3 cells were cultured overnight in 5% DMEM, washed with serum-free medium and then stimulated with different concentrations of IL-1 $\beta$  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 coomassiebrilliant blue (CBB)-stained, MMPs hydrolyzed gelatin nearby, indicated by the white binds on the gel. Increased MMP-9 activity in 3T3 cells due to the stimulation of IL-1 $\beta$ .

**Observed MW (kDa)** 19 kDa.

## Properties

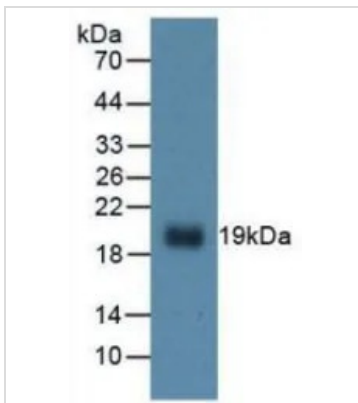
**Form** Lyophilized powder**Buffer** Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose.**Preservative** ProClin 300**Storage** For short-term storage (1-2 weeks), store at 4°C. For long-term storage, store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.**Region/Sequence** N-terminal His-Tag; Val118~Ser269 (NP\_032387.1)**Expression System** HEK293 cells**Purity** > 97%**Endotoxin** < 1 EU/µg**Conjugation** Unconjugated**Note** For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.

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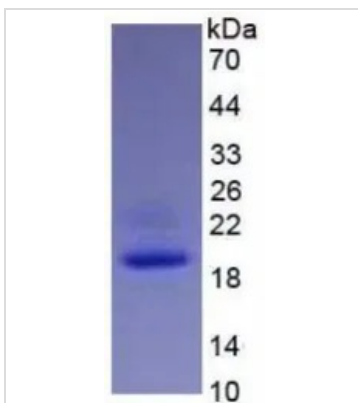
**DATA IMAGES**

**GTX00293-pro Functional Assay Image**

ELISA detection of secreted MMP9 protein activation from 3T3 cells induced by GTX00293-pro Mouse IL1 beta protein (active) for 20hrs.

Recombinant protein concentrations: 0.5 and 1 ng/ml.


**GTX00293-pro Image**

WB analysis of GTX00293-pro Mouse IL1 beta protein (active).


**GTX00293-pro Image**

SDS-PAGE analysis of GTX00293-pro Mouse IL1 beta protein (active).



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