Datasheet: PMP71

BATCH NUMBER 163417

Description:	RECOMBINANT MOUSE INTERLEUKIN-1 BETA
Name:	IL-1 BETA
Format:	Rec. Protein
Product Type:	Recombinant Protein
Quantity:	10 µg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
ELISA	▪			0.2 - 0.4ng/well
Western Blotting	▪			1.5 - 3.0ng/lane
Functional Assays	▪			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species	Mouse
Product Form	Purified recombinant protein - lyophilized
Reconstitution	Reconstitute with 0.1 ml distilled water. Care should be taken during reconstitution as the protein may appear as a film at the bottom of the vial. Bio-Rad recommend that the vial is gently mixed after reconstitution.
Preparation	Purified recombinant murine IL-1 beta, expressed in *E. coli*
Preservative Stabilisers	None present
Carrier Free	Yes
Endotoxin Level	< 0.1 ng/ug
Approx. Protein	0.1 mg/ml after reconstitution

Concentrations	
External Database Links	**UniProt:** P10749 Related reagents **Entrez Gene:** 16176 Il1b Related reagents
Product Information	Interleukin-1 beta (IL-1 beta), is a 17.5 kDa proinflammatory, cell-associated cytokine, produced by monocytes, tissue macrophages, keratinocytes and other epithelial cells. IL-1 beta promotes the proliferation of memory T cells and cytokine production. It attenuates regulatory T cell function and enables CD4+CD25- autoreactive effectors to avoid suppression. IL-1 beta signals downstream of myc and is required for angiogenesis and invasiveness of tumor cells. IL-1 beta is directly involved in neuronal injury in neurodegenerative disorders, and stimulates mitogenic FGF-like activity, bone resorption and promotes the release of collagenase and prostaglandin from synovial cells.
Protein Molecular Weight	17.5 kDa (153 amino acid residues)
Activity	The ED_{50} as determined by the dose-dependent stimulation of murine D10S cells is <0.002ng/ml, corresponding to a specific activity of > $5x10^8$ units/mg.
Purity	>98% by SDS PAGE and HPLC analysis
ELISA	PMP71 may be used as an ELISA standard for our AAM13G and AAM13B antibodies.
Western Blotting	PMP71 may be used as a postive control for Western blotting applications with our AAM13G and AAM13B antibodies.
References	1. Allan, S. *et al*. (2005) Interleukin-1 and neuronal injury. Nature Reviews Immunology 5: 629-640.
Storage	Prior to reconstitution store at -20°C. After reconstitution store at -20°C. Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the protein. Should this product contain a precipitate we recommend microcentrifugation before use.
Guarantee	Guaranteed for 3 months from the date of reconstitution or until the date of expiry, whichever comes first. Please see label for expiry date.
Health And Safety Information	Material Safety Datasheet documentation #10268 available at: https://www.bio-rad-antibodies.com/SDS/PMP71 10268
Regulatory	For research purposes only

Related Products

Recommended Useful Reagents

RABBIT ANTI MOUSE INTERLEUKIN-1 BETA (AAM13G)

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

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