

Datasheet: PMP71

BATCH NUMBER 155898

| | |
|----------------------|--------------------------------------|
| 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 <i>E. coli</i> |
| 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 ED₅₀ as determined by the dose-dependent stimulation of murine D10S cells is <0.002ng/ml, corresponding to a specific activity of > 5x10⁸ 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 positive 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
'M362404:200501'

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