

# Recombinant Mouse Interleukin-1 $\beta$ (IL-1 $\beta$ )








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

Rev. 1.00

|                                       |  |            |            |             |
|---------------------------------------|--|------------|------------|-------------|
| <b>Catalog Number:</b>                | PMC0814  | PMC0815    | PMC0816    | PMC0811     |
| <b>Quantity:</b>                      | 5 $\mu$ g  | 10 $\mu$ g | 25 $\mu$ g | 100 $\mu$ g |
| <b>Lot Number:</b>                    | See product label.   |            |            |             |
| <b>Molecular Weight:</b>              | 17 kDa   |            |            |             |
| <b>Purity:</b>                        | >95% as determined by SDS-PAGE analysis.   |            |            |             |
| <b>Amino Acid Sequence:</b>           | VPIRQLHYRL RDEQQKSLVL SDPYELKALH LNGQNINQQV IFSMSFVQGE PSNDKIPVAL GLKGKNLYLS CVMKDGTPTL QLESVDPKQY PKKKMEKRFV FNKIEVSKV EFESAEFPNW YISTSQAEHK PVFLGNNSGQ DIIDFTMESV SS   |            |            |             |
| <b>Biological Activity:</b>           | ED <sub>50</sub> range: 0.006–0.01 ng/mL (Specific Activity: $1.7 \times 10^8$ – $1.0 \times 10^8$ units/mg), determined by measuring the dose-dependent stimulation of murine D10S cells. Mouse IL-1 $\beta$ is active at 0.1–10 ng/mL for most <i>in vitro</i> applications. The optimal concentration for each specific application should be determined by an initial dose response assay.   |            |            |             |
| <b>Formulation:</b>                   | Lyophilized, carrier free.   |            |            |             |
| <b>Sterility:</b>                     | Filtered through a 0.22 micron sterile filter.   |            |            |             |
| <b>Endotoxin:</b>                     | <0.1 ng/ $\mu$ g   |            |            |             |
| <b>Production:</b>                    | Recombinant mouse IL-1 $\beta$ is produced in <i>E. coli</i> and purified via sequential chromatography.   |            |            |             |
| <b>Reconstitution Recommendation:</b> | We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute lyophilized recombinant mouse IL-1 $\beta$ in sterile, distilled water to a concentration of 0.1–1.0 mg/mL. Further dilutions should be made in low endotoxin medium or buffered solution containing a carrier protein such as heat inactivated FCS or tissue culture grade BSA.   |            |            |             |
| <b>Suggested Working Dilutions:</b>   | The optimal concentration should be determined for each specific application.  |            |            |             |
| <b>Storage:</b>                       | Store lyophilized recombinant mouse IL-1 $\beta$ at 2°C to 8°C, preferably desiccated. Upon reconstitution, apportion into working aliquots and store at $\leq -20^\circ\text{C}$ . Avoid repeated freeze/thaw cycles.   |            |            |             |
| <b>Expiration Date:</b>               | Expires one year from date of receipt when stores as instructed.   |            |            |             |
| <b>References:</b>                    | <p>Gray, P.W., D. Glaister, E. Chen, D. Goeddel, and D. Pennica (1986) Two interleukin 1 genes in the mouse: cloning and expression of the cDNA for murine interleukin 1 beta J. Immunol. 137:3644–3648.</p> <p>Orencole, S.F. and C.A. Dinarello (1989) Characterization of a subclone (D10S) of the D10.G4.1 helper T-cell line which proliferates to attomolar concentrations of interleukin-1 in the absence of mitogens. Cytokine 1:14–22.</p> <p>McTiernan, C.F., B.H. Lemster, C. Frye, S. Brooks, A. Combes, and A.M. Feldman (1997) Interleukin-1 inhibits phospholamban gene expression in cultured cardiomyocytes. Circulation Research 81:493–503.</p> |            |            |             |

## Explanation of Symbols

The symbols present on the product label are explained below:

| Symbol  | Description   |
|---|---|
|  | Catalog Number  |
|  | Research Use Only   |
|  | Use by  |
|  | Manufacturer  |
|  | Without, does not contain   |
|  | Protect from light  |
|  | Directs the user to consult instructions for use (IFU), accompanying the product. |

| Symbol  | Description                                  |
|---|--|
|  | Batch code                                   |
|  | In vitro diagnostic medical device           |
|  | Temperature limitation                       |
|  | European Community authorized representative |
|  | With, contains                               |
|  | Consult accompanying documents               |

### Limited Use Label License: Research Use Only

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**For Research Use Only. Caution: Not for human or animal therapeutic or diagnostic use.**

Manufactured under ISO 13485 Quality Standard

Manufacturing site: 7335 Executive Way | Frederick, MD 21704 | Toll Free in USA 800.955.6288

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