

# Recombinant Rat Interferon-beta (IFN-β)

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Rev. 1.00

<b>Catalog Number:</b>	PRC4024
<b>Quantity:</b>	2.4 × 10 <sup>5</sup> units/vial
<b>Lot Number:</b>	See product label.
<b>Molecular Weight:</b>	Approximately 19.7 kDa. It is important to note that this recombinant rat IFN-β is differentially glycosylated.
<b>Purity:</b>	>90%
<b>Formulation:</b>	Purified recombinant rat IFN-β, lyophilized in 0.2 mL phosphate buffered saline, pH 4.5, containing 125 mM trehalose.
<b>Endotoxin:</b>	<1 EU/vial as determined with the <i>Limulus</i> amoebocyte lysate (LAL) assay.
<b>Production:</b>	Recombinant rat IFN-β is produced in Chinese hamster ovary (CHO) cells.
<b>Purification:</b>	Purified by dye-affinity chromatography and gel-exclusion chromatography. Sterile filtered (0.22 μm) prior to lyophilization.
<b>Reconstitution Recommendation:</b>	We recommend that the vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute with 0.2 mL sterile, distilled water.
<b>Specific Activity:</b>	8 × 10 <sup>7</sup> units/mg protein. Biological activity units were determined by the amount of recombinant interferon that inhibited 50% of the cytopathic effect of Vesicular stomatitis virus in monolayer cultures of R4ec cells grown in 96-well microtiter plates. The optimal concentration should be determined for each specific application.
<b>Species Cross-Reactivity:</b>	Recombinant rat IFN-β is fully active with rat cells. Only 20% relative reactivity was observed with mouse L929 cells, and 10% relative activity was observed with human HEp-2 cells.
<b>Storage:</b>	The lyophilized protein may be stored at 2°C to 8°C. Upon reconstitution, the protein should be apportioned into working aliquots and stored at -80°C. Avoid repeated freeze-thaw cycles. The reconstituted protein will only remain bioactive for up to two weeks when stored at 2°C to 8°C.
<b>Expiration Date:</b>	Expires one year from date of receipt when stored as instructed.
<b>References:</b>	Ruuls, S.R., M.C. de Labie, K.S. Weber, C.A. Botman, R.J. Groenestein, C.D. Dijkstra, T. Olsson, and P.H. van der Meide (1996) The length of treatment determines whether IFN-beta prevents or aggravates experimental autoimmune encephalomyelitis in Lewis rats. <i>J. Immunol.</i> 157:5721-5731. Delmolino, L.M., N.A. Stearns, and J.J. Castellot (2001) COP-1, a member of the CCN family, is a heparin-induced growth arrest specific gene in vascular smooth muscle cells. <i>J. Cell. Physiol.</i> 188(1):45-55.

## 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

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