**DESCRIPTION**

**Species Reactivity** Human

**Specificity** Detects human IFN-β in direct ELISAs and Western blots. In direct ELISAs, less than 5% cross-reactivity with recombinant mouse IFN-β1, recombinant human IFN-γ, recombinant cotton rat (rcr) IFN-α and rcrIFN-γ is observed.

**Source** Polyclonal Goat IgG

**Purification** Antigen Affinity-purified

**Immunogen** E. coli-derived recombinant human IFN-β

**Endotoxin Level** <0.10 EU per 1 μg of the antibody by the LAL method.

**Formulation** Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

*Small pack size (-SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.

**APPLICATIONS**

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

<table>
<thead>
<tr>
<th>Recommended Concentration</th>
<th>Sample</th>
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<tbody>
<tr>
<td>Western Blot</td>
<td>0.1 μg/mL Recombinant Human IFN-β</td>
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</table>

**Neutralization**

Measured by its ability to neutralize IFN-β inhibition of EMCV-induced cytopathy in the HeLa human cervical epithelial carcinoma cell line. Meager, A. (1987) in Lymphokines and Interferons, a Practical Approach. Clemens, M.J. et al. (eds): IRL Press. 129. The Neutralization Dose (ND50) is typically 0.05-0.2 μg/mL in the presence of 50 pg/mL Recombinant Human IFN-β.

**DATA**

![Neutralization Graph]

**PREPARATION AND STORAGE**

**Reconstitution** Reconstitute at 0.2 mg/mL in sterile PBS.

**Shipping** The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C

**Stability & Storage** Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

**BACKGROUND**

IFN-β (interferon beta; also fibroblast IFN) is a secreted, monomeric 23-24 kDa member of the alpha/beta interferon family of molecules. It can be produced by almost all cell types in response to bacterial DNA or viral double-stranded RNA and is abundantly secreted by circulating plasmacytoid DCs. IFN-β drives monocytic transformation into DCs, and it appears to stimulate a B cell switch from IgM to IgG secretion. Mature human IFN-β is 166 amino acids (aa) in length (aa 22-187) and contains one phosphorylation site at Ser140. There is one potential alternative start site at Met22. Full-length human IFN-β (aa 22-187) shares 47% aa identity with mouse IFN-β.

**PRODUCT SPECIFIC NOTICES**

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