

**CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET**

<b>Product name</b>	IFN-beta, Mouse, Recombinant (CHO-derived)		
<b>Catalog number</b>	HC1050-01		
<b>Lot number</b>	-	<b>Expiry date</b>	-
<b>Volume</b>	Reconstitute with 1 ml distilled/de-ionized water	<b>Activity</b>	N.A.
<b>Formulation</b>	Lyophilized in sodium phosphate buffer pH 7.0, 100 µg/ml mouse albumin+0.01%/ml gelatin	<b>Amount</b>	>5x10E4 Units
<b>Host Species</b>	Mouse, CHO-derived	<b>Concentration</b>	N.A.
<b>Endotoxin</b>	N.A.	<b>Purification</b>	N.A.
<b>Storage</b>	4°C	<b>Purity</b>	N.A.

**Application notes**

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #								
Yes					•			
No								
N.D.	•	•	•	•		•	•	•

N.D.= Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot

For dilutions use a buffer containing 2% serum albumin or culture medium. (Do not use fresh serum.)

- Activity is an average of multiple determinations. Be aware that activity is dependent on the type of IFN assay and vary between labs. Bioactivity was determined using IFN-β sensor cells by monitoring the activation of the JAK/STAT/ISGF3 pathway. After reconstitution the product should be kept on ice and stored in aliquots at temperatures below -20°C to retain activity. Multiple freeze/thaw cycles should be avoided.

**General Information**

<b>Description</b>	Three types of interferons have been described: interferon-alpha (IFN-alpha), interferon-beta (IFN-beta), and interferon-gamma (IFN-gamma). An extensive variety of biological effects have been observed for the interferon family including antiviral activity; anti-proliferative activity; stimulation of cytotoxic activities in lymphocytes, natural killer cells, and macrophages; and modulation of the major histocompatibility complex. Only one mouse-IFN-beta gene has yet been described. It codes for a 161 amino acid polypeptide (20 kD). Mouse-IFN-beta binds to the type I interferon receptor. It is not recognized by antibodies directed against mouse alpha interferon or mouse gamma interferon. One unit of mouse beta interferon is the amount of beta interferon which protects 50% of the indicator cell population from viral destruction. One unit of Hycult Biotech Mouse Beta Interferon approximates the bioactivity contained in one unit of the mouse beta interferon standard prepared by NIH (Gb02-902-511).
<b>References</b>	<ol style="list-style-type: none"> <li>De Maeyer, E et al; Interferons and Other Regulatory Cytokines, 1st ed., 1988, Wiley and Sons, New York</li> <li>Vonk, W et al; Large-scale, one-step purification of murine interferon-beta using a monoclonal antibody. J Interferon Res 1983, 3: 169</li> </ol>
<b>Storage&amp;stability</b>	Lyophilized product should be stored at 4°C. Store stock solution after reconstitution in aliquots at -20°C. Note: mouse IFN-beta is highly labile when agitated. Repeated freeze and thaw cycles and prolonged exposure to light will cause loss of activity. Under recommended storage conditions, product is stable for one year.
<b>Precautions</b>	For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result from the use or derivation of this product.

We hereby certify that the above-stated information is correct and that this product has been successfully tested by the Quality Control Department. This product was released for sale according to the existing specifications. This document has been produced electronically and is valid without a signature.

Approved by Manager of QC  
Robbert Zwinkels

Date  
09/11/2018

Do you have any questions or comments regarding this product? Please contact us via [support@hycultbiotech.com](mailto:support@hycultbiotech.com).