

#### DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human IFN- $\beta$ in direct ELISAs.
<b>Source</b>	Recombinant Monoclonal Rabbit IgG Clone # 2036A
<b>Purification</b>	Protein A or G purified from cell culture supernatant
<b>Immunogen</b>	Chinese hamster ovary cell line CHO-derived recombinant human IFN- $\beta$ Met1-Asn187 Accession # P01574
<b>Formulation</b>	Supplied as a solution in PBS containing BSA, Glycerol and Sodium Azide. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 $\mu$ m filtered solution in PBS.

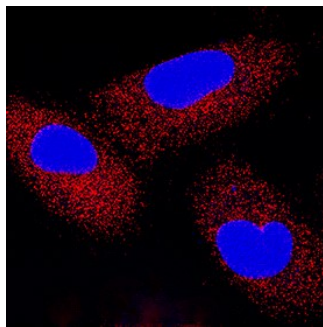
#### APPLICATIONS

**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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Immunocytochemistry</b>	1-25 $\mu$ g/mL	See Below

#### DATA

##### Immunocytochemistry



**IFN- $\beta$  in A549 Human Cell Line.** IFN- $\beta$  was detected in immersion fixed A549 human lung carcinoma cell line using Rabbit Anti-Human IFN- $\beta$  Monoclonal Antibody (Catalog # MAB8142) at 1  $\mu$ g/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rabbit IgG Secondary Antibody (red; Catalog # NL004) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

#### PREPARATION AND STORAGE

<b>Shipping</b>	The product is shipped with polar packs. 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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C, as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after opening.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after opening.</li> </ul>

#### BACKGROUND

IFN- $\beta$  (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- $\beta$  drives monocytic transformation into DCs, and it appears to stimulate a B cell switch from from IgM to IgG secretion. Mature human IFN- $\beta$  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- $\beta$  (aa 22-187) shares 47% aa identity with mouse IFN- $\beta$ .

#### PRODUCT SPECIFIC NOTICES

\*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to SDS for additional information and handling instructions.