

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human IFN- β in direct ELISAs.
Source	Recombinant Monoclonal Rabbit IgG Clone # 2036A
Purification	Protein A or G purified from cell culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human IFN- β Met1-Asn187 Accession # P01574
Formulation	Lyophilized from a 0.2 μ m 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 μ m filtered solution in PBS.

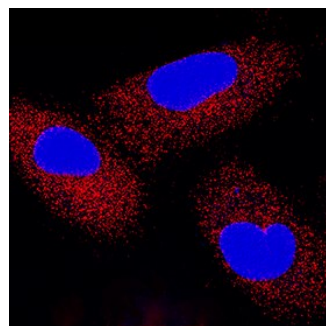
APPLICATIONS

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.

	Recommended Concentration	Sample
Flow Cytometry	0.25 μ L/10 ⁶ cells	M1 macrophages treated with 50 ng/mL each of rhGM-CSF (Catalog # 215-GM) for 6 days followed by an overnight polarization with IFN γ and LPS (Catalog # 285-IF) and restimulated with monensin for 3 hours (3uM)
Immunocytochemistry	1-25 μ g/mL	See Below

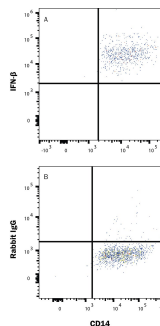
DATA

Immunocytochemistry



IFN- β in A549 Human Cell Line. IFN- β was detected in immersion fixed A549 human lung carcinoma cell line using Rabbit Anti-Human IFN- β Monoclonal Antibody (Catalog # MAB8142) at 1 μ 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](#).

Flow Cytometry



Detection of IFN- β in M1 macrophages by Flow Cytometry. M1 macrophages treated with 50 ng/mL each of rhGM-CSF (215-GM) for 6 days followed by an overnight polarization with IFN γ and LPS (285-IF) and restimulated with monensin for 3 hours (3uM) were stained with Mouse Anti-Human CD14 PE-conjugated Monoclonal Antibody (Catalog # [FAB3832P](#)) and either (A) Rabbit Anti-Human IFN- β Monoclonal Antibody (Catalog # MAB8142) or (B) Normal Rabbit IgG Control (Catalog # [MAB1050](#)) followed by Allophycocyanin-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # [F0111](#)). View our protocol for [Staining Intracellular Molecules](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 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. <ul style="list-style-type: none"> 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 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

*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.