

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human IFN- α 2 in direct ELISAs.
Source	Monoclonal Mouse IgG ₁ Clone # 995510
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	HEK293 human embryonic kidney cell line transfected with human IFN- α 2 Met1-Glu188 Accession # P01563
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.

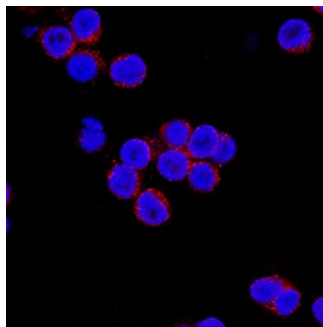
APPLICATIONS

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
Immunocytochemistry	8-25 μ g/mL	See Below

DATA

Immunocytochemistry



IFN- α 2 in Human PBMCs. IFN- α 2 was detected in immersion fixed human peripheral blood mononuclear cells (PBMCs) using Mouse Anti-Human IFN- α 2 Monoclonal Antibody (Catalog # MAB93455) at 8 μ g/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cell surfaces. View our protocol for *Fluorescent ICC Staining of Non-adherent Cells*.

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

Interferon-alpha 2 (IFNA2), also known as leukocyte interferon, is a type I interferon produced by macrophages, CD8 resting T cells, tonsillar NK cells, germinal center B cells, as well as epithelial cells, tumor cells and melanocytes. IFN alpha has at least nine different isoforms.

IFNA2 is a ligand for a cell surface receptor with two subunits, IFN-alpha R2 (ligand binding) and IFN-alpha R1 (ligand binding and signal transduction). IFNA2 has both antiviral and immunomodulatory activities on target cells. Intranasal administration has been shown to reduce viral load in subjects with the common cold. While IFNA2 is a prognostic factor for hepatocellular carcinoma, Interferon alpha 2b, has been used to treat melanoma, renal cell carcinoma, chronic myelogenous leukemia and hepatitis C.

References:

1. Chen, Zy *et al.* (2014) Br. J. Cancer **110**:733.
2. Burchert, A. *et al.* (2015) Leukemia **29**:1331.
3. Perrakis, A. *et al.* (2011) Transplant Proc. **43**:3824.
4. Akaza, H. *et al.* (2011) Jpn. J. Clin. Oncol. **41**:1023.