

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse IFN-alpha 4 in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant mouse IFN-1, -2, -6, -7, -9, -11, -12, -13, -15 or -16 is observed.
Source	Monoclonal Rat IgG _{2A} Clone # 1020125
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Human embryonic kidney cell HEK293-derived mouse IFN-alpha 4 Leu23-Glu186 Accession # P07351
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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.

Immunohistochemistry Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

The interferons (IFN) are a family of cytokines with potent antiviral, antiproliferative and immunomodulatory properties, and are classified based on their binding specificity to cell surface receptors (1). The type I IFNs bind to the interferon alpha receptor (IFNAR), which consists of two subunits: IFNAR1 (α-subunit) and IFNAR2 (β-subunit). This binding contributes to TNF-alpha induced signaling (2, 3). Both the human and mouse genome code for more than a dozen closely related IFN-alpha subtypes and the various IFN-alphas share about 80% sequence homology among them (4, 5). The mouse IFN-alpha 4 consists of 186 amino acids (aa) including a 24 aa signal peptide and a 162 aa IFN-alpha 4 mature domain. The mature mouse IFN-alpha 4 shares 58% and 76% sequence identity with mature human and rat IFN-alpha 4, respectively. The mouse IFN-alpha 4 reduces the local replication of murine cytomegalovirus in the tibia muscle (6). mIFN-A4 is a strong activator of Mx gene and was shown to be very effective in reducing splenomegaly (7).

PRODUCT SPECIFIC NOTICES

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