

#### DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Mouse                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects mouse IFN-alpha 2/IFNA2 in direct ELISA. In direct ELISAs, no cross-reactivity with mouse IFN-alpha 1, 4, 9, 11, 12 and 15 was observed.                                                                                                                            |
| <b>Source</b>             | Monoclonal Rat IgG <sub>2A</sub> Clone # 996586                                                                                                                                                                                                                             |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant                                                                                                                                                                                                                  |
| <b>Immunogen</b>          | Human embryonic kidney cell, HEK293-derived mouse IFN-alpha 2/IFNA2<br>Cys24-Glu190<br>Accession # P01573                                                                                                                                                                   |
| <b>Conjugate</b>          | Alexa Fluor 488<br>Excitation Wavelength: 488 nm<br>Emission Wavelength: 515-545 nm                                                                                                                                                                                         |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*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.

**ELISA** 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

Interferon-alpha 2 (IFNα-2) is one of 14 subtypes within the IFN-α class of Type I Interferons (1). The members of the IFN-α class, also known as alpha leukocyte interferons, encompass a group of distinct but closely related proteins which share approximately 80% amino acid (aa) sequence identity and have a similar globular structure composed of five alpha-helices (1, 3, 4). IFN-α class members signal through a common cell surface receptor complex composed of IFN-αR2 and IFN-αR1 subunits (3). As the first highly active IFN to be cloned and produced, IFNα-2 has become the prototypic IFN for academic and pharmaceutical research (2). The mature extracellular domain (ECD) of mouse IFNα-2 shares 60% and 83% aa sequence identity with human and rat, respectively. Murine IFN-α2 can eliminate cardiac viral load and protect cardiomyocytes from injury in animals infected with coxsackievirus B3 (CVB3) (5). IFN α-2 derived mutants with reduced IFNαR2 binding inhibited HIV replication and mutants with more IFNAR1 binding potentiated antiviral activity (6).

#### PRODUCT SPECIFIC NOTICES

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