

DESCRIPTION

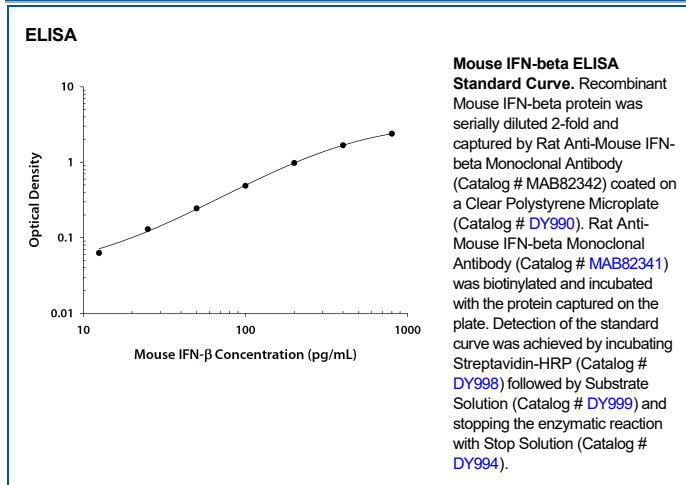
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|---------------------------|---|
| Species Reactivity | Mouse |
| Specificity | Detects mouse IFN-β in direct ELISAs. |
| Source | Monoclonal Rat IgG _{2B} Clone # 944233 |
| Purification | Protein A or G purified from cell culture supernatant |
| Immunogen | Human embryonic kidney cell HEK293-derived Mouse IFN-β Ile22-Asn182 Accession # P01575 |
| Formulation | Lyophilized from a 0.2 μm 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 μm 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.

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| ELISA | This antibody functions as an ELISA capture antibody when paired with Rat Anti-Mouse IFN-β Monoclonal Antibody (Catalog # MAB82341). <i>This product is intended for assay development on various assay platforms requiring antibody pairs. We recommend the Mouse IFN-beta DuoSet ELISA Kit (Catalog # DY8234-05) for convenient development of a sandwich ELISA or the Mouse IFN-beta Quantikine ELISA Kit (Catalog # MIFNB0) for a complete optimized ELISA.</i> |
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DATA



PREPARATION AND STORAGE

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| 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 beta (IFN- β), also known as fibroblast IFN, is a secreted, approximately 22 kDa member of the type I interferon family of molecules (1). Mature mouse IFN- β shares 75% and 47% amino acid sequence identity with the rat and human proteins, respectively. Fibroblasts are the major producers of IFN- β , but it can also be produced by dendritic cells, macrophages, and endothelial cells in response to pathogens (2). It is transcriptionally regulated by TRAF3, IRF3, IRF7, and NF- κ B (3, 4). IFN- β -deficient mice show increased susceptibility to experimental autoimmune encephalomyelitis (EAE), a disease model of human multiple sclerosis (MS) (5). Furthermore, IFN- β has been shown to suppress the Th17 cell response in both MS and EAE and has commonly been used as a treatment for MS (6-10). IFN- β can additionally induce the expression of the anti-inflammatory cytokine IL-10 (11).

References:

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