RD SYSTEMS a biotechne brand

Monoclonal Rat IgG_{2B} Clone # 944233 Catalog Number: MAB82342

DESCRIPTION	
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 lle22-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.

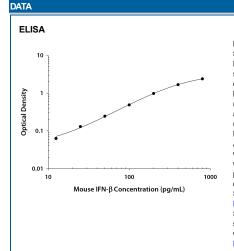
APPLICATIONS

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.

ELISA

This antibody functions as an ELISA capture antibody when paired with Rat Anti-Mouse IFN-β Monoclonal Antibody (Catalog # MAB82341).

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.



Mouse IFN-beta ELISA Standard Curve. Recombinant Mouse IFN-beta protein was serially diluted 2-fold and captured by Rat Anti-Mouse IFNbeta Monoclonal Antibody (Catalog # MAB82342) coated on a Clear Polystyrene Microplate (Catalog # DY990). Rat Anti-Mouse IFN-beta Monoclonal Antibody (Catalog # MAB82341) was biotinylated and incubated with the protein captured on the plate. Detection of the standard . curve was achieved by incubating Streptavidin-HRP (Catalog # DY998) followed by Substrate Solution (Catalog # DY999) and stopping the enzymatic reaction with Stop Solution (Catalog # DY994).

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. 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.

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Mouse IFN-β Antibody

Monoclonal Rat IgG_{2B} Clone # 944233 Catalog Number: MAB82342

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-κB (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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