Rhesus Macaque IFN-γ Biotinylated Antibody

Antigen Affinity-purified Polyclonal Goat IgG

Catalog Number: BAF961

DESCRIPTION

Species Reactivity	Rhesus Macaque
Specificity	Detects rhesus macaque IFN-γ in ELISAs and Western blots. In sandwich immunoassays, less than 30% cross-reactivity with recombinant human (rh) IFN-γ is observed and less than 0.1% cross-reactivity with rmIFN-γ, rrIFN-γ, rpIFN-γ, rcaIFN-γ, rcrIFN-γ, and rfeIFN-γ is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant rhesus macaque IFN-γ (R&D Systems, Catalog # 961-RM) Gln24-Gln165 Accession # P63310
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

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
Western Blot	0.1 µg/mL	Recombinant Rhesus Macaque IFN-γ (Catalog # 961-RM)
Rhesus Macaque IFN-γ Sandwich Immunoassay		**Reagent**
ELISA Capture	0.2-0.8 µg/mL	Rhesus Macaque IFN-γ Antibody (Catalog # AF961)
ELISA Detection	0.1-0.4 µg/mL	Rhesus Macaque IFN-γ Biotinylated Antibody (Catalog # BAF961)
Standard		Recombinant Rhesus Macaque IFN-γ (Catalog # 961-RM)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
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.

BACKGROUND

Interferon-gamma (IFN-γ), also known as type II or immune interferon, exerts a wide range of immunoregulatory activities and is considered to be the prototype proinflammatory cytokine (1, 2). Mature rhesus IFN-γ exists as a noncovalently linked homodimer of 20 - 25 kDa variably glycosylated subunits (3). It shares 90% amino acid sequence identity with human IFN-γ, 57% - 66% with bovine, canine, equine, feline, and porcine IFN-γ, and 37% - 44% with cotton rat, mouse, and rat IFN-γ. IFN-γ dimers bind to IFN-γ RI (alpha subunits) which then interact with IFN-γ RII (beta subunits) to form the functional receptor complex of two α and two β subunits. Inclusion of IFN-γ RII increases the binding affinity for ligand and the efficiency of signal transduction (4, 5). IFN-γ is produced by a variety of immune cells under inflammatory conditions, notably by T cells and NK cells (6). It plays a key role in host defense by promoting the development and activation of Th1 cells, chemoattraction and activation of monocytes and macrophages, upregulation of antigen presentation molecules, and immunoglobulin class switching in B cells. It also exhibits antiviral, antiproliferative, and apoptotic effects (6, 7). In addition, IFN-γ functions as an anti-inflammatory mediator by promoting the development of regulatory T cells and inhibiting Th17 cell differentiation (8, 9). The pleiotropic effects of IFN-γ contribute to the development of multiple aspects of atherosclerosis (7).

References:

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