Feline IFN-γ Antibody

Monoclonal Mouse IgG_1 Clone # 770626

Catalog Number: MAB764

DESCRIPTION

Species Reactivity	Feline
Specificity	Detects feline IFN-γ in direct ELISAs.
Source	Monoclonal Mouse IgG_1 Clone # 770626
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	*E. coli*-derived recombinant feline IFN-γ Gln24-Lys167 Accession # P46402
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 as a 0.2 μm filtered solution in PBS.

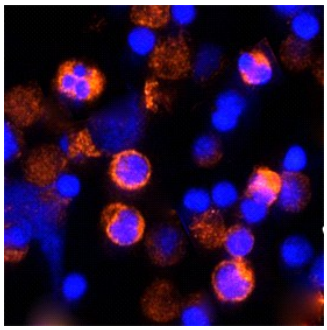
APPLICATIONS

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.*

	Recommended Concentration	Sample
Immunocytochemistry	8-25 µg/mL	See Below

DATA

Immunocytochemistry



IFN-γ in Feline PBMCs. IFN-γ was detected in immersion fixed feline peripheral blood mononuclear cells (PBMCs) using Mouse Anti-Feline IFN-γ Monoclonal Antibody (Catalog # MAB764) at 25 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.

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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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 feline IFN-γ exists as a noncovalently linked homodimer of 20 25 kDa variably glycosylated subunits (3, 4). It shares 88% amino acid sequence identity with canine IFN-γ, 72%-78% with bovine, equine, and porcine IFN-γ, and 40%-62% with cotton rat, human, mouse, rat, and rhesus 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 (5, 6). IFN-γ is produced by a variety of immune cells under inflammatory conditions, notably by T cells and NK cells (7). 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 (7, 8). In addition, IFN-γ functions as an anti-inflammatory mediator by promoting the development of regulatory T cells and inhibiting Th17 cell differentiation (9, 10). The pleiotropic effects of IFN-γ contribute to the development of multiple aspects of atherosclerosis (8).

References:

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