

DESCRIPTION

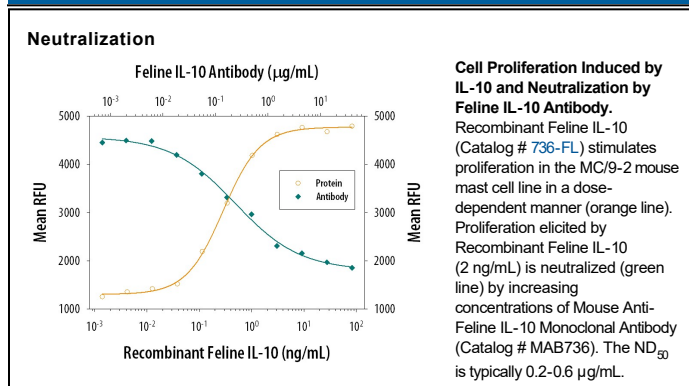
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| Species Reactivity | Feline |
| Specificity | Detects feline IL-10 in direct ELISAs and Western blots. In direct ELISAs, 40% cross-reactivity with canine IL-10 is observed and no cross-reactivity with IL-10 from human, mouse, rat, Epstein-Barr virus, or human cytomegalovirus is observed. |
| Source | Monoclonal Mouse IgG ₁ Clone # 137706 |
| Purification | Protein A or G purified from hybridoma culture supernatant |
| Immunogen | <i>E. coli</i> -derived recombinant feline IL-10 Ser19-Ile178 Accession # P55029 |
| Endotoxin Level | <0.10 EU per 1 µg of the antibody by the LAL method. |
| 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.

| | Recommended Concentration | Sample |
|-----------------------|---|---|
| Western Blot | 1 µg/mL | Recombinant Feline IL-10 (Catalog # 736-FL) |
| Neutralization | Measured by its ability to neutralize IL-10-induced proliferation in the MC/9-2 mouse mast cell line. Thompson-Snipes, L. <i>et al.</i> (1991) <i>J. Exp. Med.</i> 173 :507. The Neutralization Dose (ND ₅₀) is typically 0.2-0.6 µg/mL in the presence of 2 ng/mL Recombinant Feline IL-10. | |

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

IL-10, initially designated cytokine synthesis inhibitory factor (CSIF), was originally identified as a product of murine T helper 2 (Th2) clones that inhibited the cytokine production by Th1 clones. The feline homologue of murine IL-10 has been cloned. Feline IL-10 shares 78% amino acid sequence homology with human IL-10 and 73% sequence homology with mouse IL-10. IL-10 is a pleiotropic cytokine that can exert either immunostimulatory or immunosuppressive effects on a variety of cell types. It is a potent immunosuppressant of macrophage functions. *In vitro*, IL-10 can inhibit the accessory function and antigen-presenting capacity of monocytes by, among other effects, downregulating class II MHC expression. Thus, IL-10 can inhibit monocyte/macrophage-dependent, antigen stimulated cytokine synthesis (especially IFN-γ) by human PBMNC and NK, and mouse Th1 cells. Additionally, IL-10 is a potent inhibitor of monocyte/macrophage activation and its resultant cytotoxic effects. As an immunostimulatory cytokine, IL-10 can act on B cells to enhance their viability, cell proliferation, Ig secretion, and class II MHC expression. Aside from B lymphocytes, IL-10 is also a growth co-stimulator for thymocytes and mast cells, as well as an enhancer of cytotoxic T cell development.

References:

1. Moore, K.W. *et al.* (1993) *Annu. Rev. Immunol.* **11**:165.