

DESCRIPTION

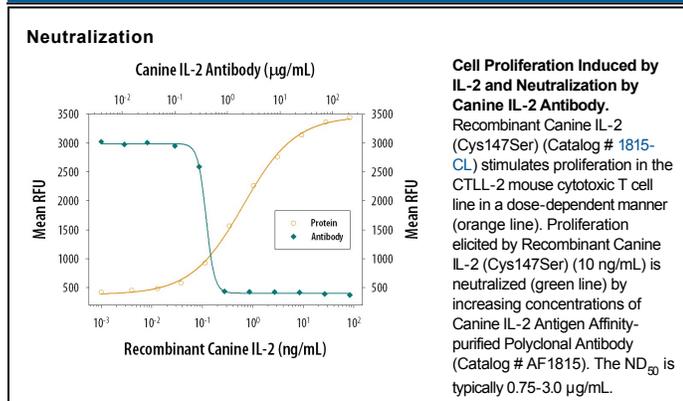
Species Reactivity	Canine
Specificity	Detects canine IL-2 in ELISAs and Western blots. In sandwich immunoassays, less than 0.2% cross-reactivity with recombinant human IL-2, recombinant mouse IL-2, recombinant rat IL-2, recombinant feline IL-2, recombinant cotton rat IL-2, recombinant bovine IL-2, recombinant equine IL-2, and recombinant porcine IL-2 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant canine IL-2 (R&D Systems, Catalog # 1815-CL) Ala21-Thr155 with a Cys147Ser substitution Accession # Q29416
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 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	0.1 µg/mL	Recombinant Canine IL-2 (Cys147Ser) (Catalog # 1815-CL)
Canine IL-2 Sandwich Immunoassay		Reagent
ELISA Capture	0.2-0.8 µg/mL	Canine IL-2 Antibody (Catalog # AF1815)
ELISA Detection	0.1-0.4 µg/mL	Canine IL-2 Biotinylated Antibody (Catalog # BAF1815)
Standard		Recombinant Canine IL-2 (Cys147Ser) (Catalog # 1815-CL)
Neutralization	Measured by its ability to neutralize IL-2-induced proliferation in the CTLL-2 mouse cytotoxic T cell line. Gearing, A.J.H. and C.B. Bird (1987) in Lymphokines and Interferons, A Practical Approach. Clemens, M.J. <i>et al.</i> (eds): IRL Press. 276. The Neutralization Dose (ND ₅₀) is typically 0.75-3.0 µg/mL in the presence of 10 ng/mL Recombinant Canine IL-2 (Cys147Ser).	

DATA



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. *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

Interleukin 2 was initially identified as a T cell growth factor that is produced by T cells following activation by mitogens or antigens. Since then, it has been shown that IL-2 can also stimulate the growth and differentiation of B cells, natural killer (NK) cells, lymphocyte activated killer (LAK) cells, monocytes/macrophages, and oligodendrocytes. The biological activity of IL-2 is mediated by the binding to cell surface receptor complexes composed of three subunits designated as α , β , and γ subunits. IL-2 binds the α subunit with low affinity. The functional high affinity IL-2 receptor is a heterotrimeric complex of the α , β , and γ subunits. IL-2 binds with intermediate affinity to the complex containing the β and γ subunits, which is also capable of transducing IL-2 signals. In T cells, the β and γ subunits are shared with the IL-15 receptor complex. The γ subunit of the IL-2 receptor complex has also been shown to be a subunit of the receptor complexes of IL-4, IL-7, and IL-9. At the amino acid sequence level, canine IL-2 shares 90%, 86%, 85%, 76%, and 75% sequence similarities to feline, human, equine, mouse, and bovine IL-2, respectively.