

DESCRIPTION

Species Reactivity	Canine
Specificity	Detects canine IL-18/IL-1F4 in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 50% cross-reactivity with recombinant porcine IL-18 is observed, 20% cross-reactivity with recombinant rhesus macaque IL-18 is observed, 15% cross-reactivity with recombinant human IL-18 is observed, and 5% cross-reactivity with recombinant mouse IL-18 and recombinant rat IL-18 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant canine IL-18/IL-1F4 Tyr37-Ser193 Accession # Q9XSR0
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.

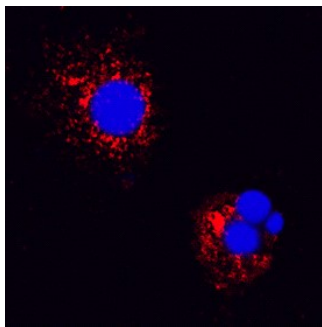
APPLICATIONS

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	0.1 µg/mL	Recombinant Canine IL-18/IL-1F4
Immunocytochemistry	5-15 µg/mL	See Below

DATA

Immunocytochemistry



IL-18/IL-1F4 in Canine PBMCs.
IL-18/IL-1F4 was detected in immersion fixed canine peripheral blood mononuclear cells (PBMCs) using Goat Anti-Canine IL-18/IL-1F4 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2924) at 15 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm and cell secretions. View our protocol for [Fluorescent ICC Staining of Non-adherent Cells](#).

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

IL-18, also known as interferon-gamma-inducing factor (IGIF) and IL-18, is an 18 kDa protein belonging to the IL-1 superfamily. It is synthesized as a 24 kDa pro-IL-18 and is processed by caspase 1 to form the active protein. IL-18 is produced by multiple cell types including monocyte/macrophages, dendritic cells, osteoblasts and keratinocytes. Mature IL-18 synergizes with IL-12 to induce differentiation of naïve Th cells into Th1 cells. It also plays multiple roles in other immune cell types including macrophages, NK cells and B cells. Canine and human mature IL-18 share 73% amino acid sequence identity.