

ORDERING INFORMATION

Catalog Number: AF2924

Lot Number: VTP01

Size: 100 µg

Formulation: 0.2 µm filtered solution in PBS with 5% trehalose

Storage: -20° C

Reconstitution: sterile PBS

Specificity: canine IL-18

Immunogen: *E. coli*-derived rcalL-18

Ig Type: goat IgG

Applications: Western blot
Immunohistochemistry
Direct ELISA

Preparation

Produced in goats immunized with purified, *E. coli*-derived, recombinant canine interleukin 18 (rcalL-18; aa 37 - 193; Accession # Q9X5R0). Canine IL-18 specific IgG was purified by canine IL-18 affinity chromatography. 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.

Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

Reconstitution

Reconstitute with sterile PBS. If 0.5 mL of PBS is used, the antibody concentration will be 0.2 mg/mL.

Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C in a **manual defrost freezer** for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

Specificity

This antibody has been selected for its ability to recognize canine IL-18 in the applications listed below. In direct ELISAs and Western blots, this antibody shows approximately 50% cross-reactivity with rpIL-18, 20% cross-reactivity with rrmlL-18, 15% cross-reactivity with rhIL-18 and 5% cross-reactivity with rmlL-18 and rrlL-18.

Applications

Western blot - This antibody can be used at 0.1 - 0.2 µg/mL with the appropriate secondary reagents to detect canine IL-18. The detection limit for rcalL-18 is approximately 2 ng/lane under non-reducing and reducing conditions.

Immunohistochemistry - This antibody will detect canine IL-18 in cells and tissues. The working dilution is 15 µg/mL. For chromogenic detection of labeling, use R&D Systems Cell and Tissue Staining Kits (CTS series).

Direct ELISA - This antibody can be used at 0.5 - 1.0 µg/mL with the appropriate secondary reagents to detect canine IL-18. The detection limit for rcalL-18 is approximately 0.3 ng/well.

Optimal dilutions should be determined by each laboratory for each application.