



# Monoclonal Anti-canine IL-18/IL-1F4 Antibody

## ORDERING INFORMATION

**Catalog Number:** MAB29241

**Clone:** 314811

**Lot Number:** WSW01

**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 rcaIL-18

**Ig class:** mouse IgG<sub>1</sub>

**Recommended Applications:**

Western blot  
Immunohistochemistry

### **Preparation**

This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, *E. coli*-derived, recombinant canine Interleukin 18 (rcaIL-18; aa 37 - 193; Accession # CAA72015). The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography. Interleukin 18, also known as interferon-gamma-inducing factor (IGIF) or IL-1 $\gamma$ , is an 18 kDa member of the IL-1 superfamily which shares biologic activities with IL-12. IL-18 is expressed by liver cells, monocyte/macrophages, osteoblasts and keratinocytes. Mature canine IL-18 shares 73% sequence identity with human IL-18. Caspase-1 (IL-1 beta-converting enzyme) has been shown to process pro-IL-18 to active IL-18. Human IL-18 has been shown to enhance NK cell activity, induce the production of IFN- $\gamma$  and GM-CSF and inhibit the production of IL-10 by PBMC.

### **Formulation**

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

### **Reconstitution**

Reconstitute with sterile PBS. If 0.2 mL of PBS is used, the antibody concentration will be 500 µg/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 detects canine IL-18 in direct ELISAs and western blots.

### **Applications**

**Western Blot** - This antibody can be used at 1 - 2 µg/mL with the appropriate secondary reagents to detect canine IL-18. Using a colorimetric detection system, the detection limit for rcaIL-18 is approximately 5 ng/lane under non-reducing and reducing conditions. Chemiluminescent detection with WesternGlo Chemiluminescent Detection Substrate (R&D Systems, Catalog # AR004) will increase sensitivity by 5 to 50 fold.

**Immunohistochemistry** - This antibody was used at a concentration of 25 µg/mL with appropriate secondary reagents to detect IL-18 in paraformaldehyde-fixed canine PBMC. For chromogenic detection of labeling, the use of R&D Systems' Cell and Tissue Staining Kits (CTS Series) is recommended.

**For immunohistochemistry images, please refer to our website at <http://www.rndsystems.com/go/ihc>.**

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