



## Anti-feline CD4 Antibody

### ORDERING INFORMATION

**Catalog Number:** AF2597

**Lot Number:** VBA01

**Size:** 100 µg

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

**Storage:** -20° C

**Reconstitution:** sterile PBS

**Specificity:** feline CD4 extracellular domain

**Immunogen:** NS0-derived rfeCD4 extracellular domain

**Ig Type:** goat IgG

**Applications:** Western blot  
Immunocytochemistry  
Flow Cytometry  
Direct ELISA

### Preparation

Produced in goats immunized with purified, NS0-derived, recombinant feline CD4 (rfeCD4) extracellular domain. Feline CD4 specific IgG was purified by feline CD4 affinity chromatography. CD4 is a type I membrane glycoprotein belonging to the immunoglobulin superfamily. It is expressed predominantly on thymocytes and a subset of mature T lymphocytes. CD4 functions in collaboration with the T cell receptor in the recognition of peptide antigens that are presented by class II major histocompatibility complexes.

### 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 feline CD4 in the applications listed below. In direct ELISAs and Western blots, this antibody shows approximately 25% cross-reactivity with rcaCD4, and 5% cross-reactivity with rhCD4 and rmCD4.

### Applications

**Western blot** - This antibody can be used at 0.1 - 0.2 µg/mL with the appropriate secondary reagents to detect feline CD4. The detection limit for rfeCD4 is approximately 1 ng/lane and 5 ng/lane under non-reducing and reducing conditions, respectively.

**Immunocytochemistry** - This antibody will detect CD4 in cells. The working dilution is 2 - 15 µg/mL. For chromogenic detection of labeling, use R&D Systems Cell and Tissue Staining Kits (CTS Series).

**Flow Cytometry** - This antibody has been tested on T-cells for use in flow cytometry. Dilute this antibody to 50 µg/mL and add 10 µL of the diluted solution to 1-2.5 x 10<sup>5</sup> cells in a total reaction volume not exceeding 200 µL. The binding of unlabeled antibodies may be visualized by adding 10 µL of a 25 µg/mL stock solution of a secondary developing reagent such as anti-goat IgG conjugated to a fluorochrome.

**Direct ELISA** - This antibody can be used at 0.5 - 1.0 µg/mL with the appropriate secondary reagents to detect feline CD4. The detection limit for rfeCD4 is approximately 0.3 ng/well.

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