



## Monoclonal Anti-feline CD4 Antibody

### ORDERING INFORMATION

**Catalog Number:** MAB25971

**Clone:** 372711

**Lot Number:** ZBF02

**Size:** 100 µg

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

**Storage:** -20° C

**Reconstitution:** sterile PBS

**Specificity:** feline CD4

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

**Ig class:** mouse IgG<sub>2a</sub>

**Recommended Applications:**  
Western blot  
Immunocytochemistry

**Other Application:**  
Direct ELISA

### Background

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.

### 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, NS0-derived, recombinant feline CD4 (rfeCD4; aa 25 - 413; Accession # BAA19124). The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography.

### 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 was selected for its ability to detect rfeCD4 in direct ELISAs and Western blots. In these formats, this antibody shows no cross-reactivity with CD4 from canine, human or mouse.

### Applications

**Western blot** - This antibody can be used at 1 - 2 µg/mL with the appropriate secondary reagents to detect feline CD4. Using a colorimetric detection system, the detection limit for rfeCD4 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.

**Immunocytochemistry** - This antibody was used at a concentration of 25 µg/mL with appropriate secondary reagents to detect CD4 in paraformaldehyde-fixed feline PBMC. For chromogenic detection of labeling, the use of R&D Systems Cell and Tissue Staining Kits (CTS Series) is recommended.

**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 3 ng/well.

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

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