

## Alexa Fluor® 647 anti-rat CD4

**Catalog # / Size:** 201513 / 25 µg  
201514 / 100 µg

**Clone:** W3/25

**Isotype:** Mouse IgG1, κ

**Immunogen:** Rat thymocyte membrane glycoproteins

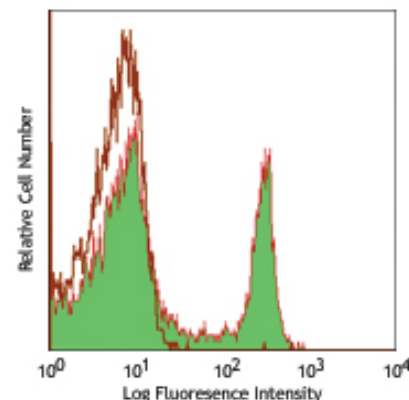
**Reactivity:** Rat

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 647 under optimal conditions. The solution is free of unconjugated Alexa Fluor® 647.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

**Concentration:** 0.5 mg/ml

**Storage:** The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**



LOU rat splenocytes stained with W3/25 Alexa Fluor® 647

## Applications:

**Applications:** FC - Quality tested  
IHC - Reported in the literature

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is ≤0.25 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

\* Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633 nm / 635 nm.

\*\* Alexa Fluor® 647 is a registered trademark of Molecular Probes, Inc. Alexa Fluor® 647 dye antibody conjugates are sold under license from Molecular Probes, Inc. for research use only, except for use in combination with microarrays and high content screening, and are covered by pending and issued patents.

**Application Notes:** The W3/25 antibody has been shown to inhibit IL-2 production by T helper cells and to prevent autoimmune T cell transfer in an MBP induced EAE model *in vivo*. Additional reported applications (for the relevant formats) include: immunohistochemistry of acetone-fixed frozen sections<sup>1,2</sup>, inhibition of IL-2 production<sup>3</sup>, inhibition of MBP-induced T cell activation in EAE transfer model<sup>3</sup>.

**Application References:**

- Whiteland JL, *et al.* 1995. *J. Histochem. Cytochem.* 43:313. (IHC)
- Shioji K, *et al.* 2001. *Circulation Res.* 89:540. (IHC)
- Mannie MD, *et al.* 1993. *J. Immunol.* 151:7293.
- Kurtz CC, *et al.* 2007. *Dev. Comp. Immunol.* 31:415. PubMed

**Description:** CD4 is a 55 kD glycoprotein also known as T4. Rat CD4 is a member of the immunoglobulin superfamily and is expressed on majority of thymocytes, macrophages, and a peripheral T cell subset (T helper cells). CD4 is a T cell co-receptor that interacts with the MHC class II molecule and is involved in T cell activation.

**Antigen References:**

- Brideau RJ, *et al.* 1980. *Eur. J. Immunol.* 10:609.
- Clark SJ, *et al.* 187. *P. Natl. Acad. Sci. USA* 84:1649.

### Related Products:

Product  
Cell Staining Buffer

Alexa Fluor® 647 Mouse IgG1, κ Isotype Ctrl (FC)

### Clone

MOPC-21

### Application

FC, ICC, ICFC  
FC, IF



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