

Alexa Fluor® 488 anti-human/mouse/rat CD278 (ICOS)

Catalog # / Size: 2167570 / 100 µg

Clone: C398.4A

Isotype: Hamster IgG

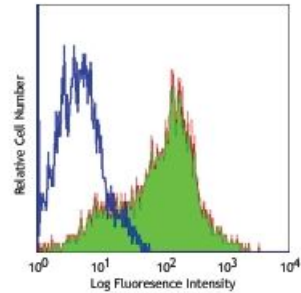
Immunogen: Mouse T cell clone D10.G4.1

Reactivity: Rat

Preparation: The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 488 under optimal conditions.

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

Concentration: 0.5



PHA-stimulated human peripheral blood lymphocytes (3 days) stained with C398.4A Alexa Fluor® 488

Applications:

Applications: Immunofluorescence

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤0.5 microg per 10⁶ cells in 100 microL volume. It is recommended that reagents be titrated for optimal performance in the particular application.

* Alexa Fluor® 488 has a maximum emission of 519 nm when it is excited at 488 nm.

Application Notes: The C398.4A antibody is useful for flow cytometric analysis and is able to costimulate T cell activation and proliferation. Additional reported applications (for the relevant formats) include: immunoprecipitation¹ and *in vitro* costimulation of T cell activation^{1,3,4}. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 313512).

- Application References:**
1. Redoglia V, *et al.* 1996. *Eur. J. Immunol.* 26:2781. (FC IP Costim)
 2. Yagi J, *et al.* 2003. *J. Immunol.* 171:783. (FC)
 3. Arimura Y, *et al.* 2002. *Int. Immunol.* 14:555. (Costim)
 4. Arimura Y, *et al.* 2004. *J. Biol. Chem.* 279:11408. (Costim)

Description: ICOS, also known as inducible costimulatory molecule and H4, is a 47-57 kD protein. This protein is homologous to the CD28/CTLA-4 proteins. ICOS is expressed on activated T cells and a subset of thymocytes. It is able to costimulate T cells proliferation. In addition, ICOS is involved in humoral immune responses (B cell germinal center formation). The ICOS ligand is B7h/B7RP-1 or B7-H2. ICOS stimulation has been shown to potentiate TCR-mediated IL-4 and IL-10 production and has been proposed to play a role in Th2 cell development.

- Antigen**
- References:**
1. Redoglia V, et al. 1996. *Eur. J. Immunol.* 26:2781.
 2. Hutloff A, et al. 1999. *Nature* 397:263.
 3. Buonfiglio D, et al. 2000. *Eur. J. Immunol.* 30:3463.
 4. Coyle AJ, et al. 2