

PE/Cyanine5 anti-human/mouse/rat CD278 (ICOS)

Catalog # / Size: 2167795 / 25 tests
2167800 / 100 tests

Clone: C398.4A

Isotype: Hamster IgG

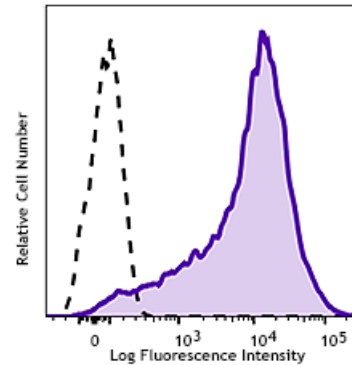
Immunogen: Mouse T cell clone D10.G4.1

Reactivity: Human, Mouse, Non-human primate, Other, Rat

Preparation: The antibody was purified by affinity chromatography and conjugated with PE/Cyanine5 under optimal conditions.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA)

Concentration: Lot-specific



PHA stimulated human peripheral blood lymphocytes (3 days) were stained with anti-human/mouse/rat CD278 (ICOS) (clone C398.4A) PE/Cyanine5 (filled histogram) or PE/Cyanine5 Armenian Hamster IgG isotype control (open histogram).

Applications:

Applications: Flow Cytometry

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 5 µL per million cells in 100 µL staining volume or 5 µL per 100 µL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

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. 2000. *Immunity* 13:95.