

Product Data Sheet

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

Catalog # / Size: 313514 / 100 µg

Clone: C398.4A

Isotype: Armenian Hamster IgG

Immunogen: Mouse T cell clone D10.G4.1

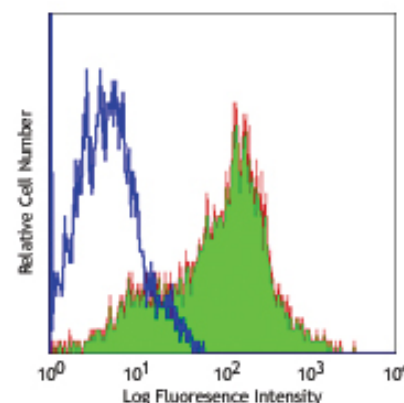
Reactivity: Human, Mouse, Rat, **Cross-Reactivity:** Rhesus, Swine (Pig, Porcine)

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

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.**



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

Applications:

Applications: FC - *Quality tested*
 IHC, IF - *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 ≤0.5 µg per 10⁶ cells in 100 µl 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.

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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, immunohistochemical staining of acetone-fixed frozen sections, 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.

Related Products:

Product
 Cell Staining Buffer
 Alexa Fluor® 488 Armenian Hamster IgG Isotype Ctrl
 Human TruStain FcX™ (Fc Receptor Blocking Solution)

Clone

HTK888

Application

FC, ICC, ICFC
 FC, ICFC
 FC, ICC, ICFC



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