

Brilliant Violet 605™ anti-human/mouse/rat CD278 (ICOS)

Catalog # / Size: 2167685 / 25 tests
2167690 / 100 tests

Clone: C398.4A

Isotype: Hamster IgG

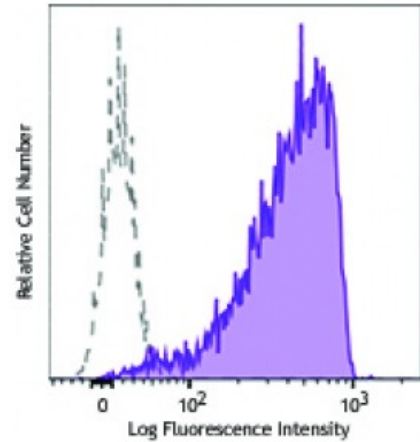
Immunogen: Mouse T cell clone D10.G4.1

Reactivity: Rat

Preparation: The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 605™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 605™ and unconjugated antibody.

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

Concentration: Lot-specific



PHA-stimulated human peripheral blood lymphocytes (3 days) stained with CD278 (clone C398.4A) Brilliant Violet 605™ (closed histogram) or Armenian hamster IgG isotype control Brilliant Violet 605™ (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 ≤0.5 microL per million cells or 0.5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 605™ excites at 405 nm and emits at 603 nm. The bandpass filter 610/20 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel. Refer to your instrument manual or manufacturer for support. Brilliant Violet 605™ is a trademark of Sirigen Group Ltd.

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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 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)
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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