BioLegend
The path to legendary discovery™

Product Data Sheet

LEAF™ Purified anti-human/mouse/rat CD278 (ICOS)

Catalog # / Size: 313511 / 50 µg
313512 / 500 µg

Clone: C398.4A

Isotype: Armenian Hamster IgG

Immunogen: Mouse T cell clone D10.G4.1

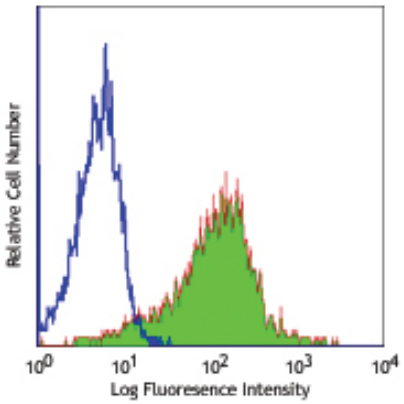
Reactivity: Human, Mouse, Rat, **Cross-Reactivity:** Rhesus, Swine (Pig, Porcine)

Preparation: The LEAF™ (Low Endotoxin, Azide-Free) antibody was purified by affinity chromatography.

Formulation: 0.2 µm filtered in phosphate-buffered solution, pH 7.2, containing no preservative. Endotoxin level is <0.1 EU/µg of the protein (<0.01 ng/µg of the protein) as determined by the LAL test.

Concentration: 1.0 mg/ml

Storage: The antibody solution should be stored undiluted at 4°C.This LEAF™ solution contains no preservative; handle under aseptic conditions.



PHA-stimulated human peripheral blood lymphocytes (3 days) stained with LEAF™ purified C398.4A, followed by anti-Armenian hamster IgG FITC

Applications:

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

Recommended Usage: For immunofluorescent staining, the suggested use of this reagent is ≤ 1.0 µg per 10^6 cells in 100 µl volume. It is recommended that reagents be titrated for optimal performance in the particular application. The LEAF™ (low endotoxin, azide-free) format is recommended for functional assays.

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: immunoprecipitation[1], 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	Clone	Application
Biotin Goat anti-hamster (Armenian) IgG	Poly4055	FC, ELISA, ICFC, IHC, IF, WB
FITC Goat anti-hamster (Armenian) IgG	Poly4055	FC, ICFC
Cell Staining Buffer		FC, ICC, ICFC
LEAF™ Purified Armenian Hamster IgG Isotype Ctrl	HTK888	FC, ICFC, WB, IP, ICC, IF, FA

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