

Anti-Mouse/Rat CD278 (ICOS) Functional Grade Purified

Catalog Number: 16-9949 Also Known As: RUO: For Research Use Only. Not for use in diagnostic procedures.



Staining of 2-day Con A-stimulated mouse splenocytes with 0.25 ug Anti-Mouse/Rat CD278 (ICOS) Purified (filled histogram) or Hamster IgG Isotype Control Purified (cat. 14-4888) (open histogram) followed by Anti-Armenian Hamster IgG FITC (cat. 11-4111). Total viable cells were used for analysis.

Product Information

Contents: Anti-Mouse/Rat CD278 (ICOS) Functional Grade
PurifiedFormulation: aqueous buffer, no sodium azideRefCatalog Number: 16-9949Temperature Limitation: Store at 2-8°C.Clone: C398.4ABatch Code: Refer to VialConcentration: 1 mg/mLBatch Code: Refer to VialHost/Isotype: Armenian Hamster IgGUse By: Refer to VialHandling Conditions: Use in sterile environment.Endotoxin Level: Less than 0.001 ng/ug antibody, as
determined by the LAL assay.

Description

The C398.4A monoclonal antibody reacts with ICOS (Inducible Costimulatory molecule), also known as H4/CRP-1/AILIM, and crossreacts with mouse and rat ICOS. ICOS is a T cell specific activation molecule and a third member of the CD28/CTLA-4 family. A dimer of 47-57 kDa, ICOS is expressed on activated T cells, has potent costimulatory activity for T cell activation and proliferation and is required for humoral immune response. ICOS binds to its ligand on activated APC including B cells called B7h/B7RP-1, is thought to play a protective role in inflammatory autoimmune diseases and be involved in the development of Th2 cells. C398.4A is reported to display strong costimulation of proliferation of T cell clones, intermediate costimulation on activated T cells, and weak costimulation on fresh resting T cells. It is a good costimulator of IL-10 production especially from pre-activated cells that express high level of H4/ICOS. The epitope recognized by C398.4A is different from that bound by the ICOSL (i.e., C398.4A does not block binding of ICOSL).

Applications Reported

The C398.4A antibody has been reported for use in flow cytometric analysis. This has also been reported for *in vitro* functional assays.

Applications Tested

This C398.4A antibody has been tested by flow cytometric analysis of Con A-stimulated mouse splenocytes. This can be used at less than or equal to 0.25 μ g per test. A test is defined as the amount (μ g) of antibody that will stain a cell sample in a final volume of 100 μ L. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

Arimura Y, Shiroki F, Kuwahara S, Kato H, Dianzani U, Uchiyama T, Yagi J. Akt is a neutral amplifier for Th cell differentiation. J Biol Chem. 2004 Mar 19;279(12):11408-16. [activating]

Lucia, M. B., D. Buonfiglio, et al. 2000. Expression of the novel T cell activation molecule hpH4 in HIV-infected patients: correlation with disease status. AIDS Res Hum Retroviruses 16(6): 549-57.

Buonfiglio, D., M. Bragardo, et al. 1999. Characterization of a novel human surface molecule selectively expressed by mature thymocytes, activated T cells and subsets of T cell lymphomas. Eur J Immunol 29(9): 2863-74.

Redoglia, V., U. Dianzani, et al. 1996. Characterization of H4: a mouse T lymphocyte activation molecule functionally associated with the CD3/T cell receptor. Eur J Immunol 26(11): 2781-9.

Related Products 13-4113 Anti-Armenian Hamster IgG Biotin (Polyclonal) 16-4888 Armenian Hamster IgG Isotype Control Functional Grade Purified (eBio299Arm) 17-4317 Streptavidin APC

Not for further distribution without written consent. Copyright © 2000-2010 eBioscience, Inc. Tel: 888.999.1371 or 858.642.2058 • Fax: 858.642.2046 • www.eBioscience.com • info@eBioscience.com