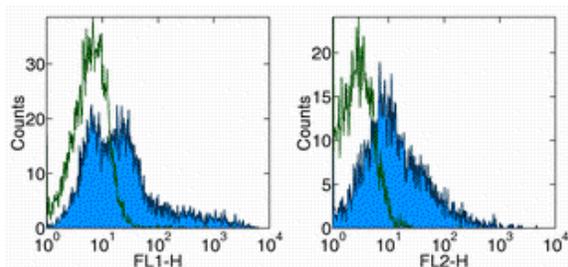


## Anti-Human CD278 (ICOS) Purified

Catalog Number: 14-9948

Also Known As:

RUO: For Research Use Only



Staining of CD3 + CD28 stimulated human PBMC with Anti-Human CD278 (ICOS) FITC (left), and Anti-Human CD278 (ICOS) PE (right). Appropriate isotype controls were used (open histogram). Total viable cells were used for analysis

### Product Information

**Contents:** Anti-Human CD278 (ICOS) Purified

**REF** **Catalog Number:** 14-9948

**Clone:** ISA-3

**Concentration:** 0.5 mg/mL

**Host/Isotype:** Mouse IgG1, kappa

**Formulation:** aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer



**Temperature Limitation:** Store at 2-8°C.



**Batch Code:** Refer to Vial



**Use By:** Refer to Vial



**Caution, contains Azide**

### Description

The ISA-3 monoclonal antibody reacts with human ICOS (Inducible COStimulatory molecule), also known as H4, CRP-1 and AILIM. ICOS is a T cell specific activation molecule and a third member of the CD28/CTLA-4 family. Human ICOS has a relative molecular mass of 55-60 kDa, composed of 27 kDa and 29 kDa chains. Human ICOS on activated T cells has potent costimulatory activity for T cell activation and is required for humoral immune responses, in particular for memory B cell and plasma cell generation. ICOS binds to its ligand, B7h/B7RP-1 expressed on activated APCs (antigen presenting cells) and on a number of inflamed peripheral tissues. Plate-bound ISA-3 is costimulatory for T cells and induces production of IL-4, IL-5, IL-10 and other cytokines, but not IL-2. ISA-3 has the same reactivity pattern and characteristics as F44. ISA-3 was generated against the human ICOS antigen. C398.4A, anti-mouse ICOS/H4 (cat. 14-9949), was shown to cross-react with human ICOS but binds to an epitope different from ISA-3. C398.4A stains activated cells brighter than ISA-3; however, it also exhibits higher staining of non-activated human peripheral blood or isolated PBMC. To achieve the brightest staining of ICOS on activated human T cells, please use 13-9948 or 12-9948 rather than 11-9948.

### Applications Reported

The ISA-3 antibody has been reported for use in flow cytometric analysis, immunoprecipitation, and immunohistochemical staining of frozen tissue sections. It has also been reported in *in vitro* functional assays. (Please use Functional Grade purified ISA-3, cat. 16-9948, in functional assays.)

### Applications Tested

The ISA-3 antibody has been tested by flow cytometric analysis of unstimulated and PHA-activated (2 days) human blood leukocytes. This can be used at less than or equal to 0.5 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

### References

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Beier KC, Hutloff A, Dittrich AM, Heuck C, Rauch A, Buchner K, Ludewig B, Ochs HD, Mages HW, Kroczeck RA. 2000. Induction, binding specificity and function of human ICOS. *Eur. J. Immunol.* 30, 3707.

Hutloff A, Dittrich AM, Beier KC, Eljaschewitsch B, Kraft R, Anagnostopoulos I, Kroczeck RA. 1999. ICOS is an inducible T-cell co-stimulator structurally and functionally related to CD28. *Nature.* 397(6716):263-6.

**Related Products**

14-4714 Mouse IgG1 K Isotype Control Purified (P3.6.2.1)

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