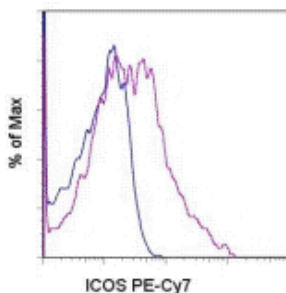


## Anti-Human CD278 (ICOS) PE-Cyanine7

Catalog Number: 25-9948

Also Known As:

RUO: For Research Use Only. Not for use in diagnostic procedures.



Staining of normal human peripheral blood cells either unstimulated (blue histogram) or stimulated for 3 days with anti-CD3/CD28 (purple histogram) with Anti-Human CD278 (ICOS) PE-Cyanine7. Total viable cells were used for analysis.

### Product Information

**Contents:** Anti-Human CD278 (ICOS) PE-Cyanine7

**REF** Catalog Number: 25-9948

**Clone:** ISA-3

**Concentration:** 5  $\mu$ L (0.125  $\mu$ g)/test

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

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

**Temperature Limitation:** Store at 2-8°C. Do not freeze. Light-sensitive material. This tandem dye is sensitive to photo-induced oxidation. Protect this vial from light during storage, handling & experimental procedures.



**LOT** Batch Code: Refer to Vial



Use By: Refer to Vial



Contains sodium 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 (catalog # 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

This ISA-3 antibody has been reported for use in flow cytometric analysis.

### Applications Tested

This ISA-3 antibody has been pre-titrated and tested by flow cytometric analysis of stimulated normal human peripheral blood cells. This can be used at 5  $\mu$ L (0.125  $\mu$ g) per test. A test is defined as the amount ( $\mu$ g) of antibody that will stain a cell sample in a final volume of 100  $\mu$ L. Cell number should be determined empirically but can range from  $10^5$  to  $10^8$  cells/test.

**Light sensitivity:** This tandem dye is sensitive photo-induced oxidation. Please protect this vial and stained samples from light.

**Fixation:** Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100  $\mu$ L cell sample + 100  $\mu$ L IC Fixation Buffer) or 1-step Fix/Lyse Solution (cat. 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency/compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

### References

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Buonfiglio D, Bragardo M, Redoglia V, Vaschetto R, Bottarel F, Bonissoni S, Bensi T, Mezzatesta C, Janeway Jr CA, Dianzani U. 2000. The T cell activation molecule H4 and the CD28-like molecule ICOS are identical. *Eur J Immunol.* 30(12):3463-7.

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**

16-0038 Anti-Human CD3 Functional Grade Purified (UCHT1)

16-0289 Anti-Human CD28 Functional Grade Purified (CD28.2)

17-0259 Anti-Human CD25 APC (BC96)

25-4714 Mouse IgG1 K Isotype Control PE-Cyanine7 (P3.6.2.8.1)

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