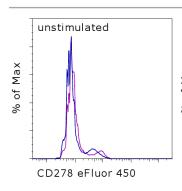


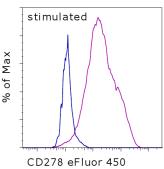
An Affymetrix Company

# Anti-Human CD278 (ICOS) eFluor® 450

Catalog Number: 48-9948

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





Staining of normal human peripheral blood cells unstimulated (left) or stimulated with Anti-Human CD3 Functional Grade Purified (cat. 16-0039) and Anti-Human CD28 Functional Grade Purified (cat. 16-0289) (right) with Mouse IgG1 K Isotype Control eFluor® 450 (cat. 48-4714) (blue histogram) or Anti-Human CD278 (ICOS) eFluor® 450 (purple histogram). Total viable cells were used for analysis.

#### **Product Information**

Contents: Anti-Human CD278 (ICOS)

eFluor® 450

REF Catalog Number: 48-9948

Clone: ISA-3

Concentration: 5 uL (0.25 ug)/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. **Batch Code:** Refer to vial



Use By: Refer to vial

### **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**

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 human peripheral blood cells. This can be used at 5  $\mu$ L (0.25  $\mu$ 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<sup>5</sup> to 10<sup>8</sup> cells/test.

eFluor® 450 is a replacement for Pacific Blue®. eFluor® 450 emits at 456 nm and is excited with the Violet laser (405 nm). Please make sure that your instrument is capable of detecting this fluorochome.

### References

Quiroga MF, Pasquinelli V, Martínez GJ, Jurado JO, Zorrilla LC, Musella RM, Abbate E, Sieling PA, García VE.Inducible costimulator: a modulator of IFN-gamma production in human tuberculosis. J Immunol. 2006 May



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Grimbacher B, Hutloff A, Schlesier M, Glocker E, Warnatz K, Drager R, Eibel H, Fischer B, Schaffer AA, Mages HW, Kroczek RA, Peter HH. 2003. Homozygous loss of ICOS is associated with adult-onset common variable immunodeficiency. Nat Immunol. 4(3):261-8.

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, Kroczek 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, Kroczek RA. 1999. ICOS is an inducible T-cell co-stimulator structurally and functionally related to CD28. Nature. 397(6716):263-6.

#### **Related Products**

16-0039 Anti-Human CD3 Functional Grade Purified (HIT3a) 16-0289 Anti-Human CD28 Functional Grade Purified (CD28.2) 48-4714 Mouse IgG1 K Isotype Control eFluor® 450 (P3.6.2.8.1)