

CD278 (ICOS) Monoclonal Antibody (ISA-3), PE-Cyanine7, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Published Species	Human
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), PE-Cyanine7, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	ISA-3
Conjugate	PE-Cyanine7
Excitation/Emission Max	569/780 nm
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.2% BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_1518754

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.125 µg)/test	20 Publications
Functional Assay (FN)	-	1 Publication

Product Specific Information

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 (Product # 14-9949-82) , 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 Product # 13-9948-82 or Product # 12-9948-42 rather than Product # 11-9948-42 .

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 µL (0.125 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 10⁴ to 10⁵.

to 10^8 cells/test.

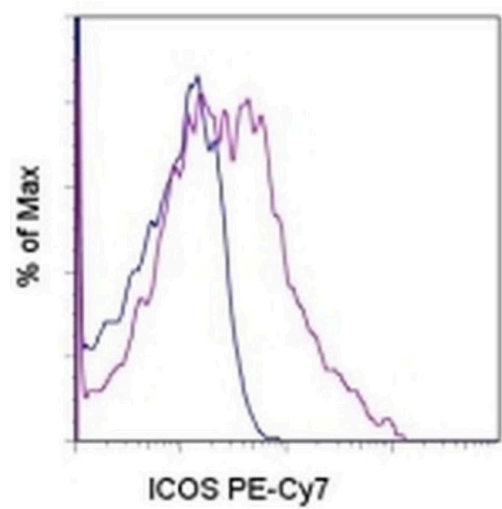
Light sensitivity: This tandem dye is sensitive photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222) (100 µL cell sample + 100 µL IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 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.

Excitation: 488-561 nm; Emission: 775 nm; Laser: Blue Laser, Green Laser, Yellow-Green Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For CD278 (ICOS) Monoclonal Antibody (ISA-3), PE-Cyanine7, eBioscience™



CD278 (ICOS) Antibody (25-9948-42) in Flow
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.

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Flow Cytometry (20)

The Journal of clinical investigation

Single-cell characterization of anti-LAG-3 and anti-PD-1 combination treatment in patients with melanoma.

"25-9948-42 was used in Flow cytometry/Cell sorting to show that anti-LAG3+anti-PD1 therapy has profound effects on NK cells and Tregs in addition to CD8+ T cells."

Authors: Huhtanen J,Kasanen H,Peltola K,Lönnberg T,Glumoff V,Brück O,Dufva O,Peltonen K,Vikkula J,Jokinen E, Ilander M, Lee MH,Mäkelä S,Nyakas M,Li B,Hernberg M,Bono P,Lähdesmäki H,Kreutzman A, Mustjoki S

Year
2023

Species
Human

eLife

Impaired HA-specific T follicular helper cell and antibody responses to influenza vaccination are linked to inflammation in humans.

"Published figure using CD278 (ICOS) monoclonal antibody (Product # 25-9948-42) in Flow Cytometry"

Authors: Hill DL,Whyte CE,Innocenti S, Lee JL,Dooley J,Wang J,James EA, Lee JC,Kwok WW,Zand MS,Liston A,Carr EJ,Linterman MA

Year
2021

[View more Flow references on thermofisher.com](#)

Functional Assay (1)

Journal of immunology (Baltimore, Md. : 1950)

Inducible costimulator: a modulator of IFN-gamma production in human tuberculosis.

Authors: Quiroga MF,Pasquinelli V,Martínez GJ,Jurado JO,Zorrilla LC,Musella RM,Abbate E,Sieling PA,García VE

Year
2006

More applications with references on thermofisher.com

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