Datasheet: MCA6147A488

BATCH NUMBER 165384

Description:	MOUSE ANTI HUMAN CD3:Alexa Fluor® 488
Specificity:	CD3
Format:	ALEXA FLUOR® 488
Product Type:	Monoclonal Antibody
Clone:	SK7
Isotype:	IgG1
Quantity:	100 TESTS/1ml

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species

Human

Product Form

Purified IgG conjugated to Alexa Fluor® 488 - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
Alexa Fluor®488	495	519

Preparation

Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% Sodium Azide (NaN_3)
1% Bovine Serum Albumin

Approx. Protein Concentrations

IgG concentration 0.05 mg/ml

Immunogen	Human CD3ε
External Database Links	**UniProt:** P07766 Related reagents **Entrez Gene:** 916 CD3E Related reagents
Synonyms	T3E
Specificity	**Mouse anti Human CD3 antibody, clone SK7** recognizes the T-cell surface glycoprotein CD3 epsilon chain (CD3ε), also known as T-cell surface antigen T3/Leu-4 epsilon. CD3ε is a subunit of the TCR-CD3 cell surface receptor complex, which is expressed at the surface of mature T cells, NKT cells and thymocytes (Mariuzza *et al.* 2020). The CD3 complex is required for intracellular signaling and for TCR surface expression. Recruitment of the TCR/CD3 complex initiates early events leading to proliferation and differentiation of mature T cells into an effector cell (Guy & Vignali 2009). Deficiency of the CD3ε chain contributes to blocking T-cell development and presentation of a severe combined immunodeficiency (SCID) phenotype (Fischer *et al.* 2005). Mouse anti-human CD3, clone SK7 binding to CD3 has been shown to be blocked by clone OKT3 and 12F6 (Li *et al.* 2005).
Purity	>90 % by SDS PAGE
Flow Cytometry	Use 10ul of the suggested working dilution to label 1x10^6 cells in 100ul
Storage	This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C. Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.
Guarantee	12 months from date of despatch.
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Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA6147A488
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 488 (MCA928A488)

Product inquiries: www.bio-rad-antibodies.com/technical-support

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

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