Datasheet: MCA2409A647T

Description:	MOUSE ANTI HUMAN CD178:Alexa Fluor® 647
Specificity:	CD178
Other names:	FAS LIGAND
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	14C2
Isotype:	IgG1
Quantity:	25 TESTS/0.25ml

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 (1)	▪			Neat

Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.

(1) **Results maybe enhanced using membrane permeabilisation. Bio-Rad recommends the use of Leucoperm™ (Product code BUF09) prior to staining.**

Target Species

Human

Product Form

Purified IgG conjugated to Alexa Fluor® 647 - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
Alexa Fluor®647	650	665

Preparation

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

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% Sodium Azide
1% Bovine Serum Albumin

Approx. Protein Concentrations

IgG concentration 0.05 mg/ml

External Database Links

UniProt:
P48023 Related reagents

	Entrez Gene: 356 FASLG Related reagents
Synonyms	APT1LG1, CD95L, FASL, TNFSF6
RRID	AB_2100660
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the P3U1 myeloma cell line.
Specificity	**Mouse anti Human CD178 antibody, clone 14C2** recognizes the human CD178, also known as Tumor necrosis factor ligand superfamily member 6, Fas ligand (FasL), Apoptosis antigen ligand or CD95 ligand. CD178 is a 281 amino acid, a ~40 kDa single pass type-II transmembrane glycoprotein bearing a single intracellular FasL domain and member of the tumor necrosis factor family . CD178 is expressed by activated T lymphocytes and NK cells (Leite-de-Moraes and Dy 1997). The protein may exist as either a membrane bound or a cleaved soluble form (Garcia *et al.* 2013). CD178 plays an important role in T cell mediated cytotoxicity (Jodo *et al.* 2005). Binding of CD178 to Fas (CD95) results in the induction of apoptosis (Ju *et al.* 1995). Mouse anti human CD178 antibody, clone 14C2 is reported to recognize a conformation dependent non-blocking epitope on CD178 (Daburon *et al.* 2013).
Flow Cytometry	Use 10ul of the suggested working dilution to label 1x10^6 cells in 100ul.
References	1. Legembre, P. *et al.* (2005) Amplification of Fas-mediated apoptosis in type II cells via microdomain recruitment. Mol Cell Biol. 25 (15): 6811-20. 2. Mesdaghi, M. *et al.* (2010) Natural killer cells in allergic rhinitis patients and nonatopic controls. Int Arch Allergy Immunol. 153 (3): 234-8. 3. Li, R. *et al.* (2014) Human heat shock protein-specific cytotoxic T lymphocytes display potent antitumour immunity in multiple myeloma. Br J Haematol. 166 (5): 690-701. 4. Ouwendijk, W.J. *et al.* (2014) Functional characterization of ocular-derived human alphaherpesvirus cross-reactive CD4 T cells. J Immunol. 192: 3730-9. 5. Matzner, P. *et al.* (2013) Resilience of the immune system in healthy young students to 30-hour sleep deprivation with psychological stress. Neuroimmunomodulation. 20: 194-204. 6. Sullivan, E.M. *et al.* (2014) NK cell genotype and phenotype at diagnosis of acute lymphoblastic leukemia correlate with postinduction residual disease. Clin Cancer Res. 20 (23): 5986-94. 7. Lindqvist CA *et al.* (2011) Both CD4+ FoxP3+ and CD4+ FoxP3- T cells from patients with B-cell malignancy express cytolytic markers and kill autologous leukaemic B cells *in vitro*. Immunology. 133 (3): 296-306. 8. Holmannova D *et al.* (2015) Inhibitory CD200R and proapoptotic CD95/CD95L molecules on innate immunity cells are modulated by cardiac surgery. Perfusion. 30 (7): 543-55. 9. Pachnio, A. *et al.* (2016) Cytomegalovirus Infection Leads to Development of High Frequencies of Cytotoxic Virus-Specific CD4+ T Cells Targeted to Vascular Endothelium. PLoS Pathog. 12 (9): e1005832.
Storage	Store at +4°C or at -20°C if preferred. Storage in frost-free freezers is not recommended. This product should be stored undiluted. This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee	12 months from date of despatch
Acknowledgements	This product is provided under an intellectual property licence from Life Technologies Corporation. The transfer of this product is contingent on the buyer using the purchase product solely in research, excluding contract research or any fee for service research, and the buyer must not sell or otherwise transfer this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; (c) manufacturing or quality assurance or quality control, or (d) resale, whether or not resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad CA 92008 USA or outlicensing@thermofisher.com
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: 10041: https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 647 (MCA928A647)

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A)
HUMAN SEROBLOCK (BUF070B)

North & South America
Tel: +1 800 265 7376
Fax: +1 919 878 3751
Email: antibody_sales_us@bio-rad.com

Worldwide
Tel: +44 (0)1865 852 700
Fax: +44 (0)1865 852 739
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