

Datasheet: MCA2409

Description:	MOUSE ANTI HUMAN CD178
Specificity:	CD178
Other names:	FAS LIGAND
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	14C2
Isotype:	IgG1
Quantity:	0.2 mg

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)	▪			1/25 - 1/50
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA	▪			
Immunoprecipitation	▪			
Western Blotting		▪		

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 - liquid
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
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml

**External Database
Links**

UniProt:

[P48023](#) [Related reagents](#)

Entrez Gene:

[356](#) FASLG [Related reagents](#)

Synonyms

APT1LG1, CD95L, FASL, TNFSF6

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 1×10^6 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. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life	18 months from date of despatch.
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: 10040: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight@488 , DyLight@549 , DyLight@649 , DyLight@680 , DyLight@800 , FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR8...)	DyLight@800
Goat Anti Mouse IgG (STAR70...)	FITC
Rabbit Anti Mouse IgG (STAR13...)	HRP
Human Anti Mouse IgG1 (HCA036...)	HRP

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

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 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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