

## Datasheet: MCA2409

<b>Description:</b>	MOUSE ANTI HUMAN CD178
<b>Specificity:</b>	CD178
<b>Other names:</b>	FAS LIGAND
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	14C2
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](http://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 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.

(1) Results may be enhanced using membrane permeabilisation. Membrane permeabilization is required for this application. The use of Leucoperm (Product Code [BUF09](#)) is recommended for this purpose.

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline

<b>Preservative Stabilisers</b>	0.09% sodium azide (NaN <sub>3</sub> )
<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P48023</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">356</a> FASLG    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	APT1LG1, CD95L, FASL, TNFSF6
<b>RRID</b>	AB_566573
<b>Fusion Partners</b>	Spleen cells from immunized BALB/c mice were fused with cells of the P3U1 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Human CD178 antibody, clone 14C2</b> 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 <a href="#">intracellular FasL</a> domain and member of the tumor necrosis factor family .</p> <p>CD178 is expressed by activated T lymphocytes and NK cells (<a href="#">Leite-de-Moraes and Dy 1997</a>). The protein may exist as either a membrane bound or a cleaved soluble form (<a href="#">Garcia et al. 2013</a>). CD178 plays an important role in T cell mediated cytotoxicity (<a href="#">Jodo et al. 2005</a>). Binding of CD178 to Fas (CD95) results in the induction of apoptosis (<a href="#">Ju et al. 1995</a>).</p> <p>Mouse anti human CD178 antibody, clone 14C2 is reported to recognize a conformation dependent non-blocking epitope on CD178 (<a href="#">Daburon et al. 2013</a>).</p>
<b>Flow Cytometry</b>	Use 10µl of the suggested working dilution to label 1x10 <sup>6</sup> cells in 100µl
<b>References</b>	<ol style="list-style-type: none"> <li>Legembre, P. <i>et al.</i> (2005) Amplification of Fas-mediated apoptosis in type II cells via microdomain recruitment. <a href="#">Mol Cell Biol. 25 (15): 6811-20.</a></li> <li>Mesdaghi, M. <i>et al.</i> (2010) Natural killer cells in allergic rhinitis patients and nonatopic controls. <a href="#">Int Arch Allergy Immunol. 153 (3): 234-8.</a></li> <li>Lindqvist CA <i>et al.</i> (2011) Both CD4+ FoxP3+ and CD4+ FoxP3- T cells from patients with B-cell malignancy express cytolytic markers and kill autologous leukaemic B cells <i>in vitro</i>. <a href="#">Immunology. 133 (3): 296-306.</a></li> <li>Matzner, P. <i>et al.</i> (2013) Resilience of the immune system in healthy young students to 30-hour sleep deprivation with psychological stress. <a href="#">Neuroimmunomodulation. 20: 194-204.</a></li> </ol>

5. 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.](#)
6. Ouwendijk, W.J. *et al.* (2014) Functional characterization of ocular-derived human alpha herpesvirus cross-reactive CD4 T cells. [J Immunol. 192: 3730-9.](#)
7. 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.](#)
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. Tomchuck, S.L. *et al.* (2015) Enhanced cytotoxic function of natural killer and CD3+CD56+ cells in cord blood after culture. [Biol Blood Marrow Transplant. 21 \(1\): 39-49.](#)
10. 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.](#)
11. Fathalla, A.M. *et al.* (2020) Polymyxin-Induced Cell Death of Human Macrophage-Like THP-1 and Neutrophil-Like HL-60 Cells Associated with the Activation of Apoptotic Pathways. [Antimicrob Agents Chemother. 64 \(9\)Aug 20 \[Epub ahead of print\].](#)

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**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.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2409>  
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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...) [HRP](#)  
Rabbit Anti Mouse IgG (STAR12...) [RPE](#)  
Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)  
Goat Anti Mouse IgG (STAR76...) [RPE](#)  
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)  
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)  
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)  
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®550](#),  
[DyLight®650](#), [DyLight®680](#), [DyLight®800](#),  
[FITC](#), [HRP](#)

Goat Anti Mouse IgG (STAR70...) [FITC](#)

## Recommended Negative Controls

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

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://bio-rad-antibodies.com/datasheets)  
'M415203:221215'

Printed on 23 Jan 2024

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