

## Datasheet: MCA2409A488

<b>Description:</b>	MOUSE ANTI HUMAN CD178:Alexa Fluor® 488
<b>Specificity:</b>	CD178
<b>Other names:</b>	FAS LIGAND
<b>Format:</b>	ALEXA FLUOR® 488
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	14C2
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](http://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.**

<b>Target Species</b>	Human		
<b>Product Form</b>	Purified IgG conjugated to Alexa Fluor® 488 - liquid		
<b>Max Ex/Em</b>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	Alexa Fluor®488	495	519
<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</b>	0.09% Sodium Azide		
<b>Stabilisers</b>	1% Bovine Serum Albumin		
<b>Approx. Protein Concentrations</b>	IgG concentration 0.05 mg/ml		
<b>External Database Links</b>	<b>UniProt:</b>		
	<a href="#">P48023</a>	<a href="#">Related reagents</a>	

**Entrez Gene:**

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

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<b>Synonyms</b>	APT1LG1, CD95L, FASL, TNFSF6
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<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the P3U1 myeloma cell line.
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<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>
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<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 1x10 <sup>6</sup> cells in 100ul.
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<b>References</b>	<ol style="list-style-type: none"><li>1. 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>2. 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>3. Li, R. <i>et al.</i> (2014) Human heat shock protein-specific cytotoxic T lymphocytes display potent antitumour immunity in multiple myeloma. <a href="#">Br J Haematol. 166 (5): 690-701.</a></li><li>4. Ouwendijk, W.J. <i>et al.</i> (2014) Functional characterization of ocular-derived human alphaherpesvirus cross-reactive CD4 T cells. <a href="#">J Immunol. 192: 3730-9.</a></li><li>5. 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><li>6. Sullivan, E.M. <i>et al.</i> (2014) NK cell genotype and phenotype at diagnosis of acute lymphoblastic leukemia correlate with postinduction residual disease. <a href="#">Clin Cancer Res. 20 (23): 5986-94.</a></li><li>7. 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>8. Holmannova D <i>et al.</i> (2015) Inhibitory CD200R and proapoptotic CD95/CD95L molecules on innate immunity cells are modulated by cardiac surgery. <a href="#">Perfusion. 30 (7): 543-55.</a></li><li>9. Pachnio, A. <i>et al.</i> (2016) Cytomegalovirus Infection Leads to Development of High Frequencies of Cytotoxic Virus-Specific CD4+ T Cells Targeted to Vascular Endothelium. <a href="#">PLoS Pathog. 12 (9): e1005832.</a></li></ol>
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<b>Storage</b>	<p>Store at +4°C or at -20°C if preferred.</p> <p>Storage in frost-free freezers is not recommended.</p> <p>This product should be stored undiluted. This product is photosensitive and should be protected from light.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
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<b>Shelf Life</b>	18 months from date of despatch.
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**Health And Safety Information** Material Safety Datasheet documentation #10041 available at: 10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

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**Regulatory** For research purposes only

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## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 488 \(MCA928A488\)](#)

### Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

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