

Datasheet: MCA1371Z

Description:	HAMSTER ANTI MOUSE CD54:Preservative Free
Specificity:	CD54
Other names:	ICAM-1
Format:	Preservative Free
Product Type:	Monoclonal Antibody
Clone:	3E2B
Isotype:	IgG
Quantity:	0.5 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	▪			neat
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA	▪			
Immunoprecipitation			▪	
Western Blotting			▪	
Functional Assays	▪			

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.

Target Species	Mouse
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	None present. Sterile filtered.
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
External Database Links	UniProt:

Entrez Gene:

[15894](#) Icam1 [Related reagents](#)

Synonyms

Icam-1

Specificity

Hamster anti Mouse CD54 antibody, clone 3E2B recognizes murine Intercellular adhesion molecule 1, also known as ICAM-1, CD54, MALA-2 or MyD10. CD54 is a 537 amino acid ~89kDa single pass type I transmembrane glycoprotein bearing five Ig-like C2 type domains. Two isoforms, differing at the N-terminal signal peptide sequence and flanking end terminal domain of the processed molecule are generated by alternative splicing([UniProt P13577](#)) . CD45 is a counter-receptor for [LFA-1](#) ([Diamond *et al.* 1990](#))

Murine CD54 is expressed at low levels on T-cells, B-cells, monocytes and endothelial cells but can be induced strongly by a number of stimuli, including UV radiation ([Tang and Udey 1991](#)).

Flow Cytometry

Use 10ul of the suggested working dilution to label 10⁶ cells in 100ul.

References

1. Scheynius, A. *et al.* (1993) Reduced contact sensitivity reactions in mice treated with monoclonal antibodies to leukocyte function-associated molecule-1 and intercellular adhesion molecule-1. [J Immunol. 150 \(2\): 655-63.](#)
2. Fabry, Z. *et al.* (1992) Adhesion molecules on murine brain microvascular endothelial cells: expression and regulation of ICAM-1 and Lgp 55. [J Neuroimmunol. 36 \(1\): 1-11.](#)
3. Johnston, S.C. *et al.* (1990) On the species specificity of the interaction of LFA-1 with intercellular adhesion molecules. [J Immunol. 145 \(4\): 1181-7.](#)
4. Greter, M. *et al.* (2009) Neo-lymphoid aggregates in the adult liver can initiate potent cell-mediated immunity. [PLoS Biol. 7 \(5\): e1000109.](#)
5. Brochard, V. *et al.* (2009) Infiltration of CD4+ lymphocytes into the brain contributes to neurodegeneration in a mouse model of Parkinson disease. [J Clin Invest. 119: 182-92.](#)
6. Stein, S. *et al.* (2010) SIRT1 reduces endothelial activation without affecting vascular function in ApoE-/- mice. [Aging \(Albany NY\). 2: 353-60.](#)
7. Impellizzeri, D. *et al.* (2015) The anti-inflammatory and antioxidant effects of bergamot juice extract (BJe) in an experimental model of inflammatory bowel disease. [Clin Nutr. 34 \(6\): 1146-54.](#)
8. Cherry, J.D. *et al.* (2013) Thermal injury lowers the threshold for radiation-induced neuroinflammation and cognitive dysfunction. [Radiat Res. 180 \(4\): 398-406.](#)
9. Fusco, R. *et al.* (2017) A flavonoid-rich extract of orange juice reduced oxidative stress in an experimental model of inflammatory bowel disease [J Funct Foods. 30: 168-78.](#)

Storage

Store at -20°C only.

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life

Please see label for expiry date.

Health And Safety Information

Material Safety Datasheet documentation #10162 available at:
10162: <https://www.bio-rad-antibodies.com/uploads/MSDS/10162.pdf>

Related Products

Recommended Secondary Antibodies

Goat Anti Hamster IgG (STAR104...) [DyLight®549](#), [DyLight®649](#), [DyLight®800](#),

[FITC](#)

Goat Anti Hamster IgG (STAR79...) [Biotin](#), [FITC](#), [HRP](#)

Recommended Negative Controls

[HAMSTER \(ARMENIAN\) IgG NEGATIVE CONTROL \(MCA2356\)](#)

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