

Datasheet: MCA54FT

BATCH NUMBER 0812R

Description:	MOUSE ANTI RAT CD43:FITC
Specificity:	CD43
Other names:	LEUKOSIALIN
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	W3/13
Isotype:	IgG1
Quantity:	0.1 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

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	Rat		
Product Form	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	FITC	490	525
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% Sodium Azide		
Stabilisers	1% Bovine Serum Albumin		
Approx. Protein	IgG concentration 0.1 mg/ml		

Concentrations

Immunogen Rat thymocyte membrane glycoproteins.

External Database Links

UniProt:

[P13838](#) [Related reagents](#)

Entrez Gene:

[24796](#) Spn [Related reagents](#)

RRID AB_322579

Fusion Partners Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS1 myeloma cell line.

Specificity

Mouse anti Rat CD43 antibody, clone W3/13 recognizes the rat CD43 cell surface antigen, also known as leukosialin, sialophorin or W3/13 antigen. CD43 is a 371 amino acid ~95 kDa heavily glycosylated single pass type 1 transmembrane glycoprotein ([Killeen et al. 1987](#)) expressed by all leucocytes with the exception of B lymphocytes. CD43, in mice acts as a T-cell counter-receptor for CD169 (Siglec-1) suggesting a role in cell-cell interactions ([van den Berg et al. 2001](#))

Mouse anti Rat CD43 antibody, clone W3/13 is routinely tested in flow cytometry on rat splenocytes.

Flow Cytometry

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

References

1. Brown, W.R.A. *et al.* (1981) Identification of a glycoprotein-like molecule at the cell surface of rat thymocytes. [Nature. 289: 456-460.](#)
2. Barclay, A. N. (1981) The localization of populations of lymphocytes defined by monoclonal antibodies in rat lymphoid tissues. [Immunology. 42: 593-600](#)
3. Jung, S. *et al.* (1994) Therapeutic effect of transforming growth factor-beta 2 on actively induced EAN but not adoptive transfer EAN [Immunology. 83: 545-551.](#)
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5. Yamanaka, Y. *et al.* (2011) Immunohistochemical analysis of subcutaneous tissue reactions to methacrylate resin-based root canal sealers. [Int Endod J. 44: 669-75.](#)
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8. Zhang, Z. *et al.* (2008) FTY720 ameliorates experimental autoimmune neuritis by inhibition of lymphocyte and monocyte infiltration into peripheral nerves. [Exp Neurol. 210: 681-90.](#)
9. Xu, K. *et al.* (2016) Expression of aryl hydrocarbon receptor in rat brain lesions following traumatic brain injury. [Diagn Pathol. 11 \(1\): 72.](#)

10. Dort, J. *et al.* (2016) Shrimp Protein Hydrolysate Modulates the Timing of Proinflammatory Macrophages in Bupivacaine-Injured Skeletal Muscles in Rats. [Biomed Res Int. 2016: 5214561.](#)
11. Zhang, Z.M. *et al.* (2016) Lesional accumulation of CD8(+) cells in sciatic nerves of experimental autoimmune neuritis rats. [Neurol Sci. 37 \(2\): 199-203.](#)
12. Rice, E.K. *et al.* (2003) Induction of MIF synthesis and secretion by tubular epithelial cells: a novel action of angiotensin II. [Kidney Int. 63 \(4\): 1265-75.](#)
13. Duchesne, E. *et al.* (2013) Mast cells can regulate skeletal muscle cell proliferation by multiple mechanisms. [Muscle Nerve. 48 \(3\): 403-14.](#)
14. Dort, J. *et al.* (2012) Beneficial effects of cod protein on skeletal muscle repair following injury. [Appl Physiol Nutr Metab. 37 \(3\): 489-98.](#)
15. Ornellas, F.M. *et al.* (2019) Mesenchymal Stromal Cells Induce Podocyte Protection in the Puromycin Injury Model. [Sci Rep. 9 \(1\): 19604.](#)

Storage

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. 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

Health And Safety Information

Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA54FT>
10041

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:FITC \(MCA1209F\)](#)

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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://www.bio-rad-antibodies.com/datasheets)

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