

Datasheet: MCA2744GA

Description:	MOUSE ANTI HUMAN LMO2
Specificity:	LMO2
Other names:	RHOM2
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	1A9-1
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			■	
Immunohistology - Frozen			■	
Immunohistology - Paraffin (1)	■			
ELISA			■	
Immunoprecipitation			■	
Western Blotting	■			
Immunofluorescence	■			

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) This product requires antigen retrieval using heat treatment prior to staining of paraffin sections.

Target Species	Human
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G
Buffer Solution	Phosphate buffered saline

Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Purified GST-LMO2 fusion protein.
External Database Links	<p>UniProt:</p> <p>P25791 Related reagents</p> <p>Entrez Gene:</p> <p>4005 LMO2 Related reagents</p>
Synonyms	RBTN2, RBTNL1, RHOM2, TTG2
RRID	AB_2249967
Fusion Partners	Cells from immunised mice were fused with cells of the K6H6B5 myeloma cell line.
Specificity	<p>Mouse anti Human LMO2 antibody, clone 1A9-1 recognizes the human Rhombotin-2 also known as LMO2 or T-cell translocation protein 2. LMO2 is a 158 amino acid ~24kD transcription factor containing 2 LIM domains that interacts with DNA binding proteins such as TAL1/SCL and GATA1. In early development, LMO2 is expressed in the central nervous system (Herberth et al. 2005) and a wide range of tissue, and in adults in myeloid and erythroid precursors, in normal germinal centre B-cells, endothelial cells and parts of the brain (Natkunam et al. 2006). LMO2 plays a vital role in early stages of haematopoiesis and in regulating yolk-sac erythropoiesis in mice (Kathleen et al. 2005). Studies suggest that it may also play a role in angiogenesis (Yamada et al. 2002).</p> <p>A major cause of T-cell acute lymphoblastic leukemia (T-ALL) is the aberrant activation of the TAL1/SCL, LMO1/2, and NOTCH1 oncogenes (Ferrando et al. 2004). Activation of the Notch signalling pathway by mutations in either the gamma-secretase or PEST domains are found in more than 50% of all T-ALL, including LMO2-induced T-ALL, and studies using mouse models, have show that activation of Notch co-operates with Scl/Lmo1 in inducing T-ALL (Weng et al. 2004). Aberrant expression of LMO2 has also been linked to certain types of B-cell lymphoma (Natkunam et al. 2008) and prostate cancer, with overexpression possibly linked to cancer progression (Ma et al. 2007).</p> <p>Mouse anti human LMO2, clone 1A9-1 has been used for the detection of LMO2 by immunohistochemistry on formalin fixed, paraffin embedded tissues and by Western blotting (Natkunam et al. 2006).</p>
Histology Positive Control Tissue	Human tonsil

Western Blotting MCA2744GA detects a band of approximately 24kDa in Raji cell lysates.

References

1. Natkunam, Y. *et al.* (2007) The oncoprotein LMO2 is expressed in normal germinal-center B cells and in human B-cell lymphomas. [Blood. 109 \(4\): 1636-42.](#)
2. Sewell, H. *et al.* (2014) Conformational flexibility of the oncogenic protein LMO2 primes the formation of the multi-protein transcription complex. [Sci Rep. 4:3643.](#)
3. Younes, S.F. *et al.* (2011) The efficacy of HGAL and LMO2 in the separation of lymphomas derived from small B cells in nodal and extranodal sites, including the bone marrow. [Am J Clin Pathol. 135: 697-708.](#)

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.

Guarantee 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 IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)
Goat Anti Mouse IgG (STAR77...) [HRP](#)
Rabbit Anti Mouse IgG (STAR12...) [RPE](#)
Rabbit Anti Mouse IgG (STAR8...) [DyLight®800](#)
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)
Goat Anti Mouse IgG (STAR76...) [RPE](#)
Goat Anti Mouse IgG (STAR70...) [FITC](#)
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®680](#),
[DyLight®800](#), [FITC](#), [HRP](#)

Recommended Negative Controls

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

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