

Datasheet: MCA6439GA

Description:	MOUSE ANTI HUMAN LAMTOR1
Specificity:	LAMTOR1
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	rCD01/3G6
Isotype:	IgG2a
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
Western Blotting	▪			1/500

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.

Target Species	Human
Species Cross Reactivity	<p>Reacts with: Mouse</p> <p>N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.</p>
Product Form	Purified IgG - liquid
Preparation	Purified recombinant IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Source	CHO-S
Buffer Solution	Phosphate buffered saline
Preservative	0.09% Sodium Azide (NaN ₃)

Stabilisers

Approx. Protein Concentrations IgG concentration 1.0 mg/ml

Immunogen *E. coli*-derived recombinant protein, amino acids 1-162 of human LAMTOR1

External Database Links

UniProt:
[Q6IAA8](#) [Related reagents](#)

Entrez Gene:
[55004](#) LAMTOR1 [Related reagents](#)

Synonyms C11orf59

Specificity

Mouse anti human LAMTOR1 antibody, clone rCD01/3G6 recognizes Ragulator complex protein LAMTOR1, also known as late endosomal/lysosomal adaptor, MAPK and MTOR activator 1. LAMTOR1 is a 17kDa protein that associates with LAMTOR2, LAMTOR3, LAMTOR4 and LAMTOR5 to form the pentameric Ragulator complex. LAMTOR1 is directly involved in the anchoring of the Ragulator complex to the lysosomal membrane where it regulates cell metabolism and growth by coordinating the activities of metabolic signaling pathways with nutrient availability.

The downregulation of LAMTOR1 affects lysosomal activation, leading to an aberrant lysosomal catabolism that produces excessive reactive oxygen species that in turn triggers p53-dependent cell cycle arrest and apoptosis ([Malek et al.,2021](#)). In cancer, LAMTOR1 has also been shown to facilitate immune escape by targeting MHC-II molecules via endocytic degradation ([Wu et al.,2022](#))

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.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA6439GA>
10040

Regulatory For research purposes only

Related Products

[Recommended Secondary Antibodies](#)

Rabbit Anti Mouse IgG (STAR12...) [RPE](#)
Goat Anti Mouse IgG IgA IgM (STAR87...) [HRP](#)
Goat Anti Mouse IgG (STAR76...) [RPE](#)
Goat Anti Mouse IgG (STAR70...) [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 (STAR77...) [HRP](#)
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)

Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL \(MCA929\)](#)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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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

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