

## Datasheet: 6067-0906

<b>Description:</b>	MOUSE ANTI HUMAN LAMININ ALPHA 2
<b>Specificity:</b>	LAMININ ALPHA 2
<b>Other names:</b>	MEROSIN HEAVY CHAIN
<b>Format:</b>	Ascites
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	5H2
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	50 µl

## 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
Immunohistology - Frozen (1)	▪			1/2000 - 1/10000
Immunohistology - Paraffin	▪			1/50
ELISA	▪			1/25000 - 1/100000
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 the appropriate negative/positive controls.

**(1)Acetone is recommended. 8 µm fixed cryostat muscle sections have been used, with an HRP conjugated secondary antibody for detection.**

<b>Target Species</b>	Human
<b>Species Cross Reactivity</b>	Reacts with: Rabbit, Monkey <b>N.B.</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.
<b>Product Form</b>	Ascitic Fluid - raw

Preservative Stabilisers	<0.1% Sodium Azide (NaN <sub>3</sub> )
Immunogen	Purified Human Merosin.
External Database Links	<p><b>UniProt:</b>  <a href="#">P24043</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">3908</a>    LAMA2    <a href="#">Related reagents</a></p>
Synonyms	LAMM
RRID	AB_2133759
Specificity	<p><b>Mouse anti Human laminin alpha 2 antibody, clone 5H2</b> recognizes the ~80 kDa fragment of laminin subunit alpha-2, also known as the laminin M chain, laminin-12 subunit alpha, laminin-2 subunit alpha, laminin-4 subunit alpha or merosin heavy chain. Laminins are trimeric basement glycoproteins consisting of three non-identical multi-domain chains (alpha, beta and gamma) each encoded by a distinct gene. The alpha-2 chain is a subunit of Laminin-2 and Laminin-4, widely expressed in the basement membrane of skeletal muscle and peripheral nerves. Laminins are thought to mediate cell attachment, migration, proliferation and differentiation with other extracellular matrix components.</p> <p>Mutation of the LAMA2 gene can lead to the development of Merosin-deficient congenital muscular dystrophy 1A (<a href="#">MDC1A</a>), a condition characterized by hypotonia, proximal weakness, hyporeflexia and difficulty walking (<a href="#">Tazek et al. 2003</a>).</p>
References	<ol style="list-style-type: none"> <li>1. Sewry, C.A. <i>et al.</i> (1995) Expression of laminin subunits in human fetal skeletal muscle. <a href="#">Histochem J. 27 (7): 497-504.</a></li> <li>2. Engvall, E. <i>et al.</i> (1990) Distribution and isolation of four laminin variants; tissue restricted distribution of heterotrimers assembled from five different subunits. <a href="#">Cell Regul. 1 (10): 731-40.</a></li> <li>3. Tan, E. <i>et al.</i> (1997) Late onset muscular dystrophy with cerebral white matter changes due to partial merosin deficiency. <a href="#">Neuromuscul Disord. 7 (2): 85-9.</a></li> <li>4. Awamura, Y. <i>et al.</i> (2008) Long-term follow-up of laminin alpha2 (merosin)-deficient muscular dystrophy in a cat. <a href="#">J Feline Med Surg. 10 (3): 274-9.</a></li> <li>5. Eriksson, A. <i>et al.</i> (2005) Skeletal muscle morphology in power-lifters with and without anabolic steroids. <a href="#">Histochem Cell Biol. 124 (2): 167-75.</a></li> <li>6. Guo, L.T. <i>et al.</i> (2003) Laminin alpha2 deficiency and muscular dystrophy; genotype-phenotype correlation in mutant mice. <a href="#">Neuromuscul Disord. 13 (3): 207-15.</a></li> <li>7. Kjellgren, D. <i>et al.</i> (2004) Laminin isoforms in human extraocular muscles. <a href="#">Invest Ophthalmol Vis Sci. 45 (12): 4233-9.</a></li> <li>8. Li, J. <i>et al.</i> (2006) Overexpression of laminin-8 in human dermal microvascular endothelial cells promotes angiogenesis-related functions. <a href="#">J Invest Dermatol. 126 (2): 432-40.</a></li> </ol>

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16. Alhamidi, M. *et al.* (2017) Limb Girdle Muscular Dystrophy type 2I: The clinical variability seen in patients homozygous for the common FKRP (c.826C>A) mutation does not correlate with histopathological alterations, levels of glycosylated  $\alpha$ -dystroglycan or laminin  $\alpha$ 2 in *vastus lateralis*. [Neuromuscular Disorders. Mar 04 \[Epub ahead of print\]](#)

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**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.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10081 available at: 10081: <https://www.bio-rad-antibodies.com/uploads/MSDS/10081.pdf>

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**Regulatory** For research purposes only

## Related Products

### Recommended Negative Controls

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

**North & South America** Tel: +1 800 265 7376

Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto: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](mailto:antibody_sales_uk@bio-rad.com)

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Tel: +49 (0) 89 8090 95 21

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Email: [antibody\\_sales\\_de@bio-rad.com](mailto:antibody_sales_de@bio-rad.com)

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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