

## PRODUCT INFORMATION SHEET

### Mouse Monoclonal Antibody to LAMB1

Format: PURE      RUO      REF      IQP-1242P      Volume: 0.1ml



#### Description

<b>Clone</b>	2D9G5
<b>Isotype</b>	Mouse IgG2a
<b>Specificity</b>	LAMB1
<b>Alternative names</b>	CLM; MGC142015
<b>Species</b>	Human
<b>Immunogen</b>	Purified recombinant fragment of LAMB1 (aa31-270) expressed in E. Coli.
<b>Mw</b>	
<b>Format</b>	Ascitic fluid containing 0.03% sodium azide.

#### Summary

LAMB1: laminin, beta 1. Laminins, a family of extracellular matrix glycoproteins, are the major noncollagenous constituent of basement membranes. They have been implicated in a wide variety of biological processes including cell adhesion, differentiation, migration, signaling, neurite outgrowth and metastasis. Laminins are composed of 3 non identical chains: laminin alpha, beta and gamma (formerly A, B1, and B2, respectively) and they form a cruciform structure consisting of 3 short arms, each formed by a different chain, and a long arm composed of all 3 chains. Each laminin chain is a multidomain protein encoded by a distinct gene. Several isoforms of each chain have been described. Different alpha, beta and gamma chain isomers combine to give rise to different heterotrimeric laminin isoforms which are designated by Arabic numerals in the order of their discovery, i.e. alpha1beta1gamma1 heterotrimer is laminin 1. The biological functions of the different chains and trimer molecules are largely unknown, but some of the chains have been shown to differ with respect to their tissue distribution, presumably reflecting diverse functions in vivo. This gene encodes the beta chain isoform laminin, beta 1. The beta 1 chain has 7 structurally distinct domains which it shares with other beta chain isomers. The C-terminal helical region containing domains I and II are separated by domain alpha, domains III and V contain several EGF-like repeats, and domains IV and VI have a globular conformation. Laminin, beta 1 is expressed in most tissues that produce basement membranes, and is one of the 3 chains constituting laminin 1, the first laminin isolated from Engelbreth-Holm-Swarm (EHS) tumor. A sequence in the beta 1 chain that is involved in cell attachment, chemotaxis, and binding to the laminin receptor was identified and shown to have the capacity to inhibit metastasis.

**Applications** Western Blotting: 1/500 - 1/2000.Immunohistochemistry: 1/200 - 1/1000.ELISA: Propose dilution 1/10000.Not yet tested in other applications.Determining optimal working dilutions by titration test.

#### Limitations

1. Conjugates with brighter fluorochromes, like PE and APC, will have a greater separation than those with dyes like FITC and CyQ. When populations overlap, the percentage of positive cells using a selected marker can be affected by the choice of fluorescent label.
2. Use of monoclonal antibodies in patient treatment can interfere with antigen target recognition by this reagent. This should be taken into account when samples are analyzed from patients treated in this fashion. IQ Products has not characterized the effect of the presence of therapeutic antibodies on the performance of this reagent.
3. Reagents can be used in different combinations, therefore laboratories need to become familiar performance characteristics of each antibody in relation with the combined markers in normal and abnormal samples.
4. Reagent data performance is based on EDTA-treated blood. Reagent performance can be affected by the use of other anticoagulants.



### Handling and Storage

Antibodies are supplied in 0.01 M sodium phosphate, 0.15 M NaCl; pH 7.3, 0.03% sodiumazide (NaN<sub>3</sub>) or as ascetic fluid containing 0.03% sodiumazide. Store the vials at 2-8 °C for a maximum of 2 weeks and store at -20°C for longer term storage. Monoclonal antibodies should be protected from prolonged exposure to light when conjugated with fluorochromes. Reagents are stable for the period shown on the vial label when stored properly.

### Warranty

Products sold hereunder are warranted only to conform to the quantity and contents stated on the label at the time of delivery to the customer. There are no warranties, expressed or implied, which extend beyond the description on the label of the product. IQ Products is not liable for property damage, personal injury, or economic loss caused by the product.

### Characterization

To ensure consistently high-quality reagents, each batch of monoclonal antibody is tested for conformance with characteristics of a standard reagent. Representative flow cytometric data is included in this data sheet.

### Warning

All products contain sodiumazide. This chemical is poisonous and hazardous. Handling should be done by trained staff only.

- References**
1. J Clin Endocrinol Metab. 2003 Oct;88(10):4960-6.
  2. Breast Cancer Res. 2005;7(4):R411-21.

### Explanation of used symbols



REF

Consult instructions for use

Catalogue number



Sufficient for



Caution, consult accompanying document



Keep away from (sun)light



Biological risks



Temperature limitation (°C)

RUO

For Research Use Only

LOT

Batch code



Use by yyyy-mm-dd



Manufacturer

EC/REP

Authorized Representative in the European Community



Conformité Européenne (European Conformity)



**Products**  
bright fluorescence

		<b>Label - tandem</b>	<b>Ex -max (nm)</b>	<b>Em -max (nm)</b>
P	PURE	purified material	-	-
F	FITC	FITC	488	519
R	R-PE	PE	488, 532	578
C	CyQ	PE-Cy5.18	488, 532	667
A	APC		595, 633, 635, 647	660
PC	PerCP		488, 532	678
PCC	PerCP-Cy5.5		488, 532	695



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