## **Laminin Monoclonal Rat Antibody (A5)**



## **Product Description**

Laminins are large hetero-trimeric, non-collagenous glycoproteins composed of  $\alpha$ ,  $\beta$ , and  $\gamma$  chains. This MAb reacts with laminin B2/1 chain of ~210 kDa and does not cross-react with other basement membrane components or fibronectin. Its specificity was established by immunoprecipitation and immunofluorescence of human skeletal muscle and kidney with laminin chain-specific MAbs. Epithelial sheets in vivo are separated from the mesenchymal elements of the stroma by a thin layer of a specialized type of extracellular matrix termed the basement membrane (BM). This structure consists of individual components, some of which are ubiquitous in BMs and some are not. The ubiquitous ones comprise laminin (LN), entactin/nidogen (EN), collagen type IV (CIV), and large heparan sulfate proteoglycan (HSPG), which interact specifically with each other to form a continuous and regular BM. Alterations of BM integrity, from local discontinuities up to complete loss, are described in many types of human and animal epithelial neoplasms. This MAb stains uniformly all human and murine basement membranes. Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the <u>CF® Dye Brochure</u> for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors. **Stock status:**Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email <u>order@biotium.com</u> to inquire about stock status and lead times before placing your order. **Catalog number key for antibody number 0308, Anti-Laminin (A5)** 

## References

Ljubimov AV et. al., Int J Cancer, 1992; 50:562-566. | Ljubimov AV et. al. Lab Investigation, 1995; 72:461-473. | Folkvord et. al., J Histochem Cytochem, 1989; 37:105-113

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Product attributes			
Antibody number	#0308		
Antibody reactivity (target) Antibody type	Laminin		
	Primary		
Host species	Rat		
Clonality	Monoclonal		
Clone	A5		
Isotype	IgG2a, kappa		
Molecular weight	210 kDa		
Synonyms	LAMB2; LAMC1; Laminin B2 chain; Laminin gamma 1; Laminin gamma 1 chain		
Human gene symbol	LAMC1		
Entrez gene ID	3915		
SwissProt	P11047, Q5VYE7 & Q6NVY8		
Unigene	609663		
Immunogen	Murine EHS laminin preparation		
Antibody target cellular	Extracellular matrix		
Verified antibody	IHC (FFPE) (verified)		
applications Species reactivity	Human, Mouse		
Antibody application notes	For coating for ELISA, order Ab without BSA, Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Optimal dilution and staining procedure for a specific application should be determined by user, Recommended starting concentrations for litration are 1-2 ug/mL for most applications, or 1 ug/million cells/100 uL for flow cytometry, Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95 °C followed by cooling at RT for 20 minutes		
Positive control	Normal colon or carcinomas		
Shipping condition	Room temperature		
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C		
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended		
Regulatory status	For research use only (RUO)		
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 22 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide.		

Antibody research areas

Email: btinfo@biotium.com

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified,	N/A	N/A	N/A	

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