

Datasheet: 5620-0436

BATCH NUMBER 153772

Description:	MOUSE ANTI HUMAN LAMININ ALPHA 5
Specificity:	LAMININ ALPHA 5
Format:	Ascites
Product Type:	Monoclonal Antibody
Clone:	4C7 (2D8/33)
Isotype:	IgG2a
Quantity:	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.

	Yes	No	Not Determined	Suggested Dilution
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 the appropriate negative/positive controls.

Target Species	Human
Species Cross Reactivity	Does not react with:Rat, Mouse
Product Form	Ascites - liquid
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Immunogen	Purified human laminin.
External Database Links	UniProt: O15230 Related reagents

Entrez Gene:[3911](#) LAMA5 [Related reagents](#)**Synonyms**

KIAA0533, KIAA1907

RRID

AB_617326

Specificity

Mouse anti Human Laminin Alpha 5 antibody, clone 4C7 recognizes the laminin alpha 5 chain also known as Laminin-10 subunit alpha, Laminin-11 subunit alpha or Laminin-15 subunit alpha. Laminin is a complex glycoprotein composed of three polypeptide chain complexes. Laminin alpha 5 is expressed in heart, lung, kidney, skeletal muscle, pancreas, retina and placenta, there is little or no expression in brain and liver.

References

1. Engvall, E. *et al.* (1986) Mapping of domains in human laminin using monoclonal antibodies: localization of the neurite-promoting site. [J Cell Biol. 103 \(6 Pt 1\): 2457-65.](#)
2. Engvall, E. *et al.* (1990) Distribution and isolation of four laminin variants; tissue restricted distribution of heterotrimers assembled from five different subunits. [Cell Regul. 1 \(10\): 731-40.](#)
3. Ido, H. *et al.* (2006) Probing the integrin-binding site within the globular domain of laminin-511 with the function-blocking monoclonal antibody 4C7. [Matrix Biol. 25 \(2\): 112-7.](#)
4. Chang, C. *et al.* (2015) A laminin 511 matrix is regulated by TAZ and functions as the ligand for the $\alpha 6 \beta 1$ integrin to sustain breast cancer stem cells. [Genes Dev. 29 \(1\): 1-6.](#)
5. Zamurs, L. *et al.* (2013) Chain-specific antibodies for laminin-511. [Growth Factors. 31 \(6\): 209-19.](#)
6. Tiger, C.F. *et al.* (1997) Presence of laminin alpha5 chain and lack of laminin alpha1 chain during human muscle development and in muscular dystrophies. [J Biol Chem. 272 \(45\): 28590-5.](#)
7. Pouliot, N. & Kusuma, N. (2013) Laminin-511: a multi-functional adhesion protein regulating cell migration, tumor invasion and metastasis. [Cell Adh Migr. 7 \(1\): 142-9.](#)
8. Schaff, M. *et al.* (2013) Integrin $\alpha 6 \beta 1$ is the main receptor for vascular laminins and plays a role in platelet adhesion, activation, and arterial thrombosis. [Circulation. 128 \(5\): 541-52.](#)
9. Vuoristo, S. *et al.* (2013) A novel feeder-free culture system for human pluripotent stem cell culture and induced pluripotent stem cell derivation. [PLoS One. 8 \(10\): e76205.](#)
10. Wondimu, Z. *et al.* (2013) A novel monoclonal antibody to human laminin $\alpha 5$ chain strongly inhibits integrin-mediated cell adhesion and migration on laminins 511 and 521. [PLoS One. 8 \(1\): e53648.](#)
11. Breitkreutz, D. *et al.* (2013) Skin basement membrane: the foundation of epidermal integrity--BM functions and diverse roles of bridging molecules nidogen and perlecan. [Biomed Res Int. 2013: 179784.](#)

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	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10081 available at: https://www.bio-rad-antibodies.com/SDS/5620-0436 10081
Regulatory	For research purposes only

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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](https://www.bio-rad-antibodies.com/datasheets)
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