

Cat. No:	MAB-94582
Size:	100 ug
Clone:	A7L6
Concentration:	1mg/ml
Host:	Rt
Isotype:	IgG2a
Reactivity:	hu, Ms, Rt, Bov, Cod, Wolfish Western Blot: 1:100 - 1:1000 Immunohistochemistry(frozen tissues): 1:25 - 1:200 Immunohistochemistry(paraffin-embedded tissues): 1:25 - 1:200
Applications:	immunohistochemistry with avidin-biotinylated Horseradish peroxidase complex (ABC) Immunoprecipitation Immunocytochemistry Optimal antibody dilution should be determined by titration
Purification:	Purified
Background:	Proteoglycans are macromolecules consisting of a variety of core proteins with covalently attached one or several polysaccharide chains of the glycosaminoglycan type (heparan sulphate, heparin, chondroitin sulphate, dermatan sulphate or keratan sulphate). At least two forms of basement membrane heparan sulphate proteoglycan (HSPG) have been identified. One with a large core protein (> 400 kD) and one with a small core protein (30 kD). The large HSPG is probably the most abundant basement membrane proteoglycan. It is located predominantly in the lamina lucida, where it forms clustered aggregates and interacts with other basement membrane components to form the matrix. In addition, it also plays a critical role in attachment of cells to the basal membrane via integrin receptors. Source: A7L6 is a Rat monoclonal IgG2a antibody derived by fusion of X63 Ag8.653 Mouse myeloma cells with spleen cells from a Fisher Rat immunized with high molecular mass material derived from the Engelbreth-Holm-Swarm (EHS) tumor matrix containing laminin, entactin and HSPG. A7L6 recognizes domain IV of the core protein of the large heparan sulphate proteoglycan or perlecan. The reactivity is independent of the galactosaminoglycan moieties. Therefore, the epitope is not sensitive to heparitinase treatment.
Form:	Liquid
Buffer:	The vial contains 100 ul 1 mg/ml monoclonal purified antibody in PBS containing 0.09% sodium azide. Formulation: The vial contains 100 ul 1 mg/ml monoclonal purified antibody in PBS containing 0.09% sodium azide
Storage:	The antibody is shipped at ambient temperature and may be stored at +4°C. For prolonged storage prepare appropriate aliquots and store at or below -20°C. Prior to use, an aliquot is thawed slowly in the dark at ambient temperature, spun down again and used to prepare working dilutions by adding sterile phosphate buffered saline (PBS, pH 7.2). Repeated thawing and freezing should be avoided. Working dilutions should be stored at +4°C, not refrozen, and preferably used the same day. If a slight precipitation occurs upon storage, this should be removed by centrifugation. It will not affect the performance or the concentration of the product.

References

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5. Couchman, J. R., Ljubimov, A. V., Sthanam, M., Horchar, T., and Hassell, J. R. (1995). Antibody mapping and tissue localization of globular and cysteine-rich regions of perlecan domain III. *J Histochem Cytochem* 43, 955-63.
6. Tapanadechopone, P., Hassell, J. R., Rigatti, B., and Couchman, J. R. (1999). Localization of glycosaminoglycan substitution sites on domain V of Mouse perlecan. *Biochem Biophys Res Commun* 265, 680-90.
7. Tingbø, M. G., Kolset, S. O., Ofstad, R., Enersen, G., Hannesson, K. O. (2006). Identification and distribution of heparan sulfate proteoglycans in the white muscle of Atlantic cod (*Gadus morhua*) and spotted wolffish (*Anarhichas minor*). *Comparative Biochemistry and Physiology Part B* 143,441-52.

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