

BM6043P**Monoclonal Antibody to Cardiotin - Purified**

Quantity:	0.1 mg
Concentration:	1 mg/ml
Background:	<p>Cardiotin is a high molecular weight protein complex (300 kDa) located in the mitochondria of cardiomyocytes and skeletal muscle. The cardiotin structure exists of subunits of 60 kDa and 100 kDa, probably in a tetrameric configuration. Both subunits contain the same amino-terminal 14 amino-acid sequence, showing high homology to human skeletal muscle α-actinin.</p> <p>During cardiac contractile dysfunction and myocard cell differentiation, the cardiotin distribution is affected. Compared to other structural proteins, cardiotin is one of the first to respond to insults (ischemia, fibrillation) that influence the functional status of cardiomyocytes.</p>
Host / Isotype:	Mouse / IgM
Recommended Isotype Controls:	SM13P
Clone:	R2G
Immunogen:	Total protein extract of Chicken gizzard.
Format:	State: Liquid purified IgG fraction Buffer System: PBS with 0.09% Sodium Azide as preservative
Applications:	Immunoblotting. Immunohistochemistry on Frozen Sections. Immunohistochemistry on Paraffin-Embedded tissue. <i>Recommended Dilutions:</i> 1/25–1/100 for immunohistochemistry with avidinbiotinylated horseradish peroxidase complex (ABC) as detection reagent and 1/25–1/500 for Immunoblotting applications. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	R2G recognizes the 300 kDa cardiotin protein complex and its 100 kDa and 60 kDa subunits. This antibody reacts with Canine, Feline, Goat, Hamster, Human, Monkey, Mouse, Rabbit, Rat, Xenopus, Zebrafish tissues.
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freeze-thaw cycles. Shelf life: One year from despatch.
General Readings:	<ol style="list-style-type: none">Schaart G, van der Ven PF, Ramaekers FC. Characterization of cardiotin, a structural component in the myocard. Eur J Cell Biol. 1993 Oct;62(1):34-48. PubMed PMID: 8269977.Schaart G, Moens L, Endert JM, Ramaekers FC. Biochemical characterization of cardiotin, a sarcoplasmic reticulum associated protein. FEBS Lett. 1997 Feb 17;403(2):168-72. PubMed PMID: 9042960.Ausma J, Wijffels M, van Eys G, Koide M, Ramaekers F, Allessie M, et al.

Dedifferentiation of atrial cardiomyocytes as a result of chronic atrial fibrillation. *Am J Pathol.* 1997 Oct;151(4):985-97. PubMed PMID: 9327732.

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Pictures:

Immunofluorescence staining of a 7 days old Zebrafish embryo.

