

#### OriGene Technologies, Inc.

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# Product datasheet for BM6043P

## Cardiotin Mouse Monoclonal Antibody [Clone ID: R2G]

## **Product data:**

Product Type:	Primary Antibodies
Clone Name:	R2G
Applications:	IF, IHC, WB
Recommended Dilution:	Immunoblotting. Immunohistochemistry on Frozen Sections. Immunohistochemistry on Paraffin-Embedded tissue. Recommended Dilutions: 1/25–1/100 for immunohistochemistry with avidinbiotinylated horseradish peroxidase complex (ABC) as detection reagent and 1/25– 1/500 for Immunoblotting applications.
Reactivity:	Canine, Feline, Goat, Hamster, Human, Monkey, Mouse, Porcine, Rat, Xenopus, Zebrafish
Host:	Mouse
lsotype:	IgM
Clonality:	Monoclonal
Immunogen:	Total protein extract of Chicken gizzard.
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.
Formulation:	PBS with 0.09% Sodium Azide as preservative State: Purified State: Liquid purified IgG fraction
Concentration:	lot specific
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freeze-thaw cycles.
Stability:	Shelf life: One year from despatch.



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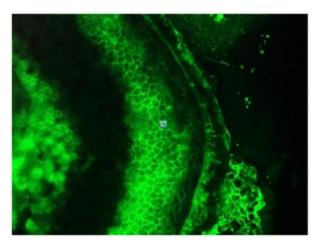


#### Background:

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 aminoterminal 14 amino-acid sequence, showing high homology to human skeletal muscle  $\alpha$ -actinin.

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.

### **Product images:**



Immunofluorescence staining of a 7 days old Zebrafish embryo.

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