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## Zuschläge

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Nordic MUbio

# Mouse anti Cardiotin

Catalogue number: **MUB0307P**

| | |
|---|---|
| Clone | R2G |
| Isotype | IgM |
| Product Type | Primary Antibodies |
| Units | 0.1 mg |
| Host | Mouse |
| Species reactivity | Cat<br>Dog<br>Goat<br>Hamster<br>Human<br>Monkey<br>Mouse<br>Rabbit<br>Rat<br>Xenopus<br>Zebrafish |
| Application | Immunoblotting<br>Immunohistochemistry (frozen)<br>Immunohistochemistry (paraffin) |

## Distributors

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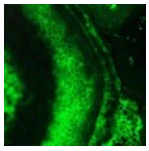
**Background**

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 amino-terminal 14 amino-acid sequence, showing high homology to Human skeletal muscle α-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.

Figure 1 Immunofluorescence staining of a 7 days old zebrafish embryo



**Source**

R2G is a Mouse monoclonal IgM antibody derived by fusion of SP2/0-Ag14 Mouse myeloma cells, with spleen cells from a Mouse

immunized with a total protein extract of Chicken gizzard.

**Product**
Each vial contains 100 ul purified monoclonal antibody in PBS containing 0.09% sodium azide.

**Applications**
R2G is useful for immunohistochemistry on frozen and paraffin-embedded tissue and immunoblotting. In immunoblotting assays R2G reacts with the 300 kDa cardiotin protein complex and its 100 kDa and 60 kDa subunits. Recommended range is 1:25 – 1:100 for immunohistochemistry with avidin-biotinylated Horseradish peroxidase complex (ABC) as detection reagent. Optimal antibody dilution for immunoblotting applications should be determined by titration.

**Specificity**
R2G reacts with cardiotin, a mitochondrion-associated protein, which is present in cardiomyocytes and skeletal muscle.

**Storage**
Store at 4°C, or in small aliquots at -20°C.

**References**
1. Schaart, G., van der Ven, P. F., and Ramaekers, F. C. (1993). Characterization of cardiotin, a structural component in the myocard, Eur J Cell Biol 62, 34-48.
2. Schaart, G., Moens, L., Endert, J. M., and Ramaekers, F. C. (1997). Biochemical characterization of cardiotin, a sarcoplasmic reticulum associated protein, FEBS Lett 403, 168-72.
3. Ausma, J., Wijffels, M., van Eys, G., Koide, M., Ramaekers, F., Allessie, M., and Borgers, M. (1997). Dedifferentiation of atrial cardiomyocytes as a result of chronic atrial fibrillation, Am J Pathol 151, 985-97.
4. Dispersyn, G. D., Geuens, E., Ver Donck, L., Ramaekers, F. C., and Borgers, M. (2001). Adult Rabbit cardiomyocytes undergo hibernation-like dedifferentiation when co-cultured with cardiac fibroblasts, Cardiovasc Res 51, 230-40.
5. Ausma, J., Litjens, N., Lenders, M-H., Duimel, H., Mast, F., Wouters, L., Ramaekers, F., Allessie, M., and Borgers, M. (2001). Time course of atrial fibrillation-induced cellular structural remodeling in atria of the Goat, J Mol Cell Cardiol 33, 2083-94.
6. Dispersyn, G. D., Mesotten, L., Meuris, B., Maes, A., Mortelmans, L., Flameng, W., Ramaekers, F. C., and Borgers, M. (2002). Dissociation of cardiomyocyte apoptosis and dedifferentiation in infarct border zones, Eur Heart J in press.

7. Ausma, J., van der Velden, H. M., Lenders, M. H., van Ankeren, E. P., Jongsma, H. J., Ramaekers, F. C., Borgers, M., and Allessie, M. A. (2003). Reverse structural and gap-junctional remodeling after prolonged atrial fibrillation in the Goat. Circulation 107, 2051-2058.
8. RR Pochampally, BT Neville, EJ Schwarz, MM Li, DJ Prockop (2004). Rat adult stem cells (marrow stromal cells) engraft and differentiate in chick embryos without evidence of cell fusion, Proc Natl Acad Sci USA 101, 9282-85

**Caution**

This product is intended FOR RESEARCH USE ONLY, and FOR TESTS IN VITRO, not for use in diagnostic or therapeutic procedures involving humans or animals. This product contains sodium azide. To prevent formation of toxic vapors, do not mix with strong acidic solutions. To prevent formation of potentially explosive metallic azides in metal plumbing, always wash into drain with copious quantities of water. This datasheet is as accurate as reasonably achievable, but Nordic-MUbio accepts no liability for any inaccuracies or omissions in this information.