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## BM6044P Monoclonal Antibody to Cardiotin - Purified

Quantity: 0.1 mg
Concentration: 1 mg/ml

**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.

Host / Isotype: Mouse / IgM

Recommended Isotype

SM13P

**Controls:** 

Clone: SR-2

Immunogen: 100 kDa Cardiotin subunit

Format: State: Liquid purified lg fraction

Buffer System: PBS

Preservatives: 0.09% Sodium Azide

Applications: Immunoblotting.

Immunohistochemistry on Frozen Sections.

Immunohistochemistry on Paraffin-Embedded Tissue.

Recommended Dilutions: 1/25–1/100 for immunohistochemistry with ABC as

detection reagent, and 1/50-1/500 for immunoblotting.

Other applications not tested. Optimal dilutions are dependent on conditions and

should be determined by the user.

**Specificity:** This antibody *SR-2* reacts with Cardiotin, a mitochondrionassociated protein, which is

present in cardiomyocytes and skeletal muscle. SR-2 reacts with cardiomyocytes,

skeletal muscle, stromal and epithelial cells as well in vivo as in vitro.

In immunoblotting assays SR-2 reacts with the 300 kDa cardiotin protein complex

and its 100 kDa and 60 kDa subunits.

**Species Reactivity:** Tested: Human, Swine.

Storage: Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing. Shelf life: one year from despatch.

General Readings: 1. 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.