

Product datasheet for BM6044P

OriGene Technologies, Inc.

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Cardiotin Mouse Monoclonal Antibody [Clone ID: SR-2]

Product data:

Product Type: Primary Antibodies

Clone Name: SR-2

Applications: IHC, WB

Recommended Dilution: 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.

Reactivity: Human, Porcine

Host: Mouse Isotype: IgM

Clonality: Monoclonal

Immunogen: 100 kDa Cardiotin subunit

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.

Formulation: PBS

State: Purified

State: Liquid purified Ig fraction Preservative: 0.09% Sodium Azide

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 freezing and thawing.

Stability: Shelf life: one year from despatch.







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 αactinin.

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.