

CARP (m): 293T Lysate: sc-119002

BACKGROUND

A proposed genetic marker of cardiac hypertrophy, CARP (cardiac ankyrin repeat protein) is a nuclear protein with an established role in regulation of cardiac gene expression. A distinct increase in CARP expression occurs in rats with abdominal aorta constriction, spontaneous hypertension and Dahl salt-sensitivity. In cardiomyocytes, CARP inhibits transcription of both cardiac Troponin C and atrial natriuretic factor. Specifically, expression of the CARP gene, which lies downstream of the cardiac homeobox gene Nkx-2.5, inhibits Nkx-2.5 transactivation of atrial natriuretic factor promoter. An increase in CARP expression is observed in the ventricular tissue of patients with end-stage heart failure. The major Ca^{2+} binding protein of cardiac sarcoplasmic reticulum (SR), calsequestrin (CSQ), upregulates the CARP gene and may contribute to the development of cardiac hypertrophy and fibrosis. TGF β induces CARP expression in vascular smooth muscle cells (VSMCs), wherein CARP may mediate the inhibitory effects of TGF β on VSMC proliferation.

REFERENCES

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STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

CHROMOSOMAL LOCATION

Genetic locus: Ankrd1 (mouse) mapping to 19 C2.

PRODUCT

CARP (m): 293T Lysate represents a lysate of mouse CARP transfected 293T cells and is provided as 100 μg protein in 200 μl SDS-PAGE buffer.

APPLICATIONS

CARP (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive CARP antibodies. Recommended use: 10-20 μl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.