

HMGCR (m2): 293T Lysate: sc-120842

BACKGROUND

The human enzyme hydroxy-3-methylglutaryl coenzyme A reductase (HMGCR) limits the rate of cholesterol synthesis, a necessary process for cellular growth, in liver tissue. Phosphorylation of HMGCR inactivates the enzyme, which occurs via a negative feedback mechanism mediated by sterols and non-sterol metabolites derived from the product of the reductase reaction. Inhibitors of HMGCR (statins) exert anti-inflammatory effects and decrease the frequency of cardiovascular events by lowering plasma cholesterol. Additionally, intermediate products along the pathway catalyzed by HMGCR, which modulate signal transducing proteins such as Ras, provide possible ties between HMGCR regulation and new chemotherapeutic methods.

REFERENCES

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2. Duhamel-Clerin, E., Villarroja, H., Mehtali, M., Lapie, P., Besnard, F., Gumpel, M. and Lachapelle, F. 1994. Cellular expression of an HMGCR promoter-CAT fusion gene in transgenic mouse brain: evidence for a developmental regulation in oligodendrocytes. *Glia* 11: 35-46.
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4. Viedt, C., Shen, W., Fei, J., Kamimura, M., Hänsch, G.M., Katus, H.A. and Kreuzer, J. 2003. HMG-CoA reductase inhibition reduces the pro-inflammatory activation of human vascular smooth muscle cells by the terminal complement factor C5b-9. *Basic Res. Cardiol.* 98: 353-361.
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CHROMOSOMAL LOCATION

Genetic locus: Hmgcr (mouse) mapping to 13 D1.

PRODUCT

HMGR (m2): 293T Lysate represents a lysate of mouse HMGR transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

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.

PROTOCOLS

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

APPLICATIONS

HMGR (m2): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive HMGR antibodies. Recommended use: 10-20 µl per lane.

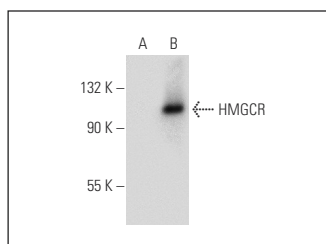
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

HMGR (C-1): sc-271595 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse HMGR expression in HMGR transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

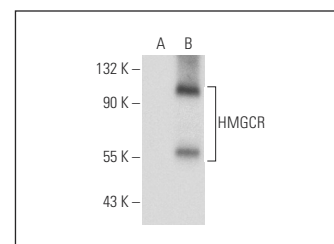
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



HMGR (C-1): sc-271595. Western blot analysis of HMGR expression in non-transfected: sc-117752 (A) and mouse HMGR transfected: sc-120842 (B) 293T whole cell lysates.



HMGR (C-1): sc-271595. Western blot analysis of HMGR expression in non-transfected: sc-117752 (A) and mouse HMGR transfected: sc-120842 (B) 293T whole cell lysates.

RESEARCH USE

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