

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

linkedin.com/company/szaboscandic in



ATP5B (m): 293T Lysate: sc-118620



The Power to Question

BACKGROUND

Mitochondrial ATP synthase is composed of two multi-subunit complexes that utilize an inner membrane electrochemical gradient to catalyze the synthesis of ATP during oxidative phosphorylation. The two multi-subunit complexes are designated F₁ and F₀, the former of which comprises the soluble catalytic core and the latter of which comprises the membrane-spanning proton channel of ATP synthase. F₁ consists of five distinct subunits, designated ATP5A, ATP5B, ATP5C1, ATP5D and ATP5E, while F₀ consists of ten subunits, designated ATP5H, ATP5G1, ATP5I, ATP5G2, ATP5J2, ATP5J, ATP5G3, ATP5S, ATP5F1 and ATP5L. ATP5B, also designated ATPMB, ATPSB or mitochondrial ATP synthetase, β subunit, is a 529 amino acid protein that localizes to the mitochondrial membrane and exists as a subunit of the F_0 complex. ATP5B is encoded by a nuclear gene and assembled with the other subunits encoded by both mitochondrial and nuclear genes. The ATP5B gene is activated by members of the Ets family of transcription factors, suggesting that Ets transcription factors are involved in the enhanced expression of the ATP5B gene in highly proliferating cells and in the coordinate transcription of nuclear genes for mitochondrial proteins. ATP5B mRNA levels vary among species through transcriptional control with high expression levels in heart, lower levels in skeletal muscle and the lowest levels in liver and kidney.

REFERENCES

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- 8. Leyva, J.A., et al. 2003. Understanding ATP synthesis: structure and mechanism of the F₁-ATPase (Review). Mol. Membr. Biol. 20: 27-33.

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.

CHROMOSOMAL LOCATION

Genetic locus: Atp5b (mouse) mapping to 10 D3.

PRODUCT

ATP5B (m): 293T Lysate represents a lysate of mouse ATP5B transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

ATP5B (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive ATP5B antibodies. Recommended use: 10-20 μ l 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.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com