

ATP5E (FL-51): sc-134729

BACKGROUND

Mitochondrial ATP synthases (ATPases) transduce the energy contained in membrane electrochemical proton gradients into the energy required for synthesis of high-energy phosphate bonds. ATPases contain two linked complexes: F_1 , the hydrophilic catalytic core; and F_0 , the membrane-embedded protein channel. F_1 consists of three α chains and three β chains, which are weakly homologous, as well as one γ chain, one δ chain and one ϵ chain. F_0 consists of three subunits: a, b and c. The ϵ chain of F_1 contains 50 amino acids and is the smallest of the five ATPase F_1 chains. Mitochondrial ATPase ϵ chain (ATP5E) localizes to the mitochondria and catalyzes ATP synthesis.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ATP5E (human) mapping to 20q13.32; Atp5e (mouse) mapping to 2 H4.

SOURCE

ATP5E (FL-51) is a rabbit polyclonal antibody raised against amino acids 1-51 representing full length ATP5E of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

ATP5E (FL-51) is recommended for detection of ATP5E of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

ATP5E (FL-51) is also recommended for detection of ATP5E in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for ATP5E siRNA (h): sc-60229, ATP5E siRNA (m): sc-60230, ATP5E shRNA Plasmid (h): sc-60229-SH, ATP5E shRNA Plasmid (m): sc-60230-SH, ATP5E shRNA (h) Lentiviral Particles: sc-60229-V and ATP5E shRNA (m) Lentiviral Particles: sc-60230-V.

Molecular Weight of ATP5E: 7 kDa.

Positive Controls: PC-3 cell lysate: sc-2220, SW-13 cell lysate: sc-24778 or HeLa whole cell lysate: sc-2200.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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

PROTOCOLS

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



Try **ATP5E (A-11): sc-393695** or **ATP5E (A-12): sc-393696**, our highly recommended monoclonal alternatives to ATP5E (FL-51).