

ATP5G3 (T-13): sc-107445

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 F_1 and F_0 , the former of which comprises the soluble catalytic core and the latter of which comprises the membrane-spanning proton channel of ATP synthase. F_1 consists of five distinct subunits, designated ATP5A, ATP5B, ATP5C1, ATP5D and ATP5E, while F_0 consists of ten subunits, designated ATP5H, ATP5G1, ATP5I, ATP5G2, ATP5J2, ATP5J, ATP5G3, ATP5S, ATP5F1 and ATP5L. ATP5G1, ATP5G2 and ATP5G3 localize to the mitochondrial membrane and exist as subunits of the F_0 complex. ATP5G3 [ATP synthase, H^+ transporting, mitochondrial F_0 complex, subunit C3 (subunit 9)], also known as ATP synthase proteolipid P3, ATPase protein 9, ATPase subunit c or P3, consists of 142 amino acids and is encoded by a gene that maps to human chromosome 2q31.1.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ATP5G3 (human) mapping to 2q31.1; Atp5g3 (mouse) mapping to 2 C3.

SOURCE

ATP5G3 (T-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ATP5G3 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.

Blocking peptide available for competition studies, sc-107445 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ATP5G3 (T-13) is recommended for detection of ATP5G3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

ATP5G3 (T-13) is also recommended for detection of ATP5G3 in additional species, including equine.

Suitable for use as control antibody for ATP5G3 siRNA (h): sc-94597, ATP5G3 siRNA (m): sc-141350, ATP5G3 shRNA Plasmid (h): sc-94597-SH, ATP5G3 shRNA Plasmid (m): sc-141350-SH, ATP5G3 shRNA (h) Lentiviral Particles: sc-94597-V and ATP5G3 shRNA (m) Lentiviral Particles: sc-141350-V.

Molecular Weight of ATP5G3: 15 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

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

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.