

TMEM70 (G-11): sc-393714

BACKGROUND

TMEM70 (transmembrane protein 70) is a 260 amino acid multi-pass mitochondrial membrane protein that exists as multiple alternatively spliced isoforms which are expressed in pancreas, liver, muscle and kidney tissue. Mutations in the gene encoding TMEM70 are associated with ATP synthase deficiency and neonatal mitochondrial encephalomyopathy, suggesting that TMEM70 plays an important role in ADP-stimulated respiration, mitochondrial ATP synthesis, ATP hydrolysis and the maintenance of membrane potential. The gene encoding TMEM70 maps to human chromosome 8, which consists of nearly 146 million base pairs, houses more than 800 genes and is associated with a variety of diseases and malignancies.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: TMEM70 (human) mapping to 8q21.11.

SOURCE

TMEM70 (G-11) is a mouse monoclonal antibody raised against amino acids 1-260 representing full length TMEM70 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RESEARCH USE

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

APPLICATIONS

TMEM70 (G-11) is recommended for detection of TMEM70 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

Suitable for use as control antibody for TMEM70 siRNA (h): sc-77756, TMEM70 shRNA Plasmid (h): sc-77756-SH and TMEM70 shRNA (h) Lentiviral Particles: sc-77756-V.

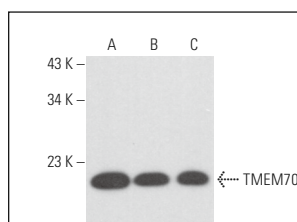
Molecular Weight of TMEM70 isoforms: 29/19 kDa.

Positive Controls: MOLT-4 cell lysate: sc-2233, K-562 whole cell lysate: sc-2203 or SUP-T1 whole cell lysate: sc-364796.

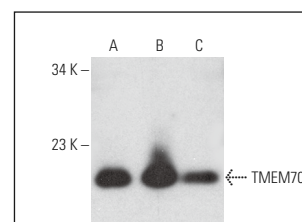
RECOMMENDED SUPPORT REAGENTS

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



TMEM70 (G-11): sc-393714. Western blot analysis of TMEM70 expression in K-562 (A), Jurkat (B) and SUP-T1 (C) whole cell lysates.



TMEM70 (G-11): sc-393714. Western blot analysis of TMEM70 expression in MOLT-4 (A), K-562 (B) and Jurkat (C) whole cell lysates.

STORAGE

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

PROTOCOLS

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