

GDC (Q-12): sc-137494

BACKGROUND

GDC (graves disease carrier protein), also known as SLC25A16 (solute carrier family 25 member 16), ML7, GDA or HGT.1, is a 332 amino acid multi-pass membrane protein belonging to the mitochondrial carrier family. Localizing to mitochondrial inner membrane, GDC is essential for the accumulation of coenzyme A in the mitochondrial matrix and facilitates the transport and exchange of molecules between the cytosol and the mitochondrial matrix space. GDC contains three Solcar repeats and is encoded by a gene mapping to human chromosome 10q21.3, a region associated with Graves disease. Making up 4.5% of the human genome, chromosome 10 encodes roughly 800 genes including PTEN, a tumor suppressor gene that has been linked to the development of Cowden syndrome. The chromosome 10 encoded gene ERCC6 is important for DNA repair and is linked to Cockayne syndrome which is characterized by extreme photosensitivity and premature aging.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SLC25A16 (human) mapping to 10q21.3; Slc25a16 (mouse) mapping to 10 B4.

SOURCE

GDC (Q-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of GDC of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-137494 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GDC (Q-12) is recommended for detection of GDC 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).

GDC (Q-12) is also recommended for detection of GDC in additional species, including equine.

Suitable for use as control antibody for GDC siRNA (h): sc-90626, GDC siRNA (m): sc-145372, GDC shRNA Plasmid (h): sc-90626-SH, GDC shRNA Plasmid (m): sc-145372-SH, GDC shRNA (h) Lentiviral Particles: sc-90626-V and GDC shRNA (m) Lentiviral Particles: sc-145372-V.

Molecular Weight of GDC: 36 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.