

GDC (L-24): sc-133614

BACKGROUND

GDC (Graves disease carrier protein), also known as SLC25A16 (solute carrier family 25 member 16), 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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- Teresi, R.E., et al. 2007. Cowden syndrome-affected patients with PTEN promoter mutations demonstrate abnormal protein translation. *Am. J. Hum. Genet.* 81: 756-767.
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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 or our catalog for detailed protocols and support products.

CHROMOSOMAL LOCATION

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

SOURCE

GDC (L-24) is a Protein A purified rabbit polyclonal antibody raised against synthetic GDC peptide of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

GDC (L-24) 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), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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.

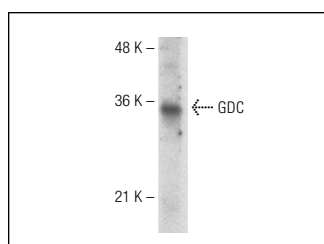
Molecular Weight of GDC: 36 kDa.

Positive Controls: Human GDC transfected 293T whole cell lysate.

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).

DATA



GDC (L-24): sc-133614. Western blot analysis of human GDC transfected 293T whole cell lysate.

RESEARCH USE

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