

LGA (175I2M): sc-517626

BACKGROUND

LGA (L-glutamine amidohydrolase), also known as GLS2 (glutaminase 2 (liver, mitochondrial)), GLS or GA, is a 602 amino acid protein that localizes to the mitochondrion and contains two ANK repeats. Expressed in brain, liver and pancreas, LGA functions as a mitochondrial phosphate-activated glutaminase that catalyzes the hydrolysis of glutamine to glutamate and ammonia. LGA is overexpressed in breast cancer cell lines, suggesting a role for LGA in tumorigenesis. The gene encoding LGA maps to human chromosome 12, which encodes over 1,100 genes and comprises approximately 4.5% of the human genome. Chromosome 12 is associated with a variety of diseases and afflictions, including hypochondrogenesis, achondrogenesis, Kniest dysplasia, Noonan syndrome and Trisomy 12p, which causes facial developmental defects and seizure disorders.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: GLS2 (human) mapping to 12q13.3; Gls2 (mouse) mapping to 10 D3.

SOURCE

LGA (175I2M) is a mouse monoclonal antibody raised against recombinant LGA of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains 100 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

LGA (175I2M) is recommended for detection of LGA 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 immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for LGA siRNA (h): sc-96242, LGA siRNA (m): sc-146716, LGA shRNA Plasmid (h): sc-96242-SH, LGA shRNA Plasmid (m): sc-146716-SH, LGA shRNA (h) Lentiviral Particles: sc-96242-V and LGA shRNA (m) Lentiviral Particles: sc-146716-V.

Molecular Weight of LGA: 66 kDa.

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) 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. 3) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

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.