

LGA (E-15): sc-168423

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 2 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 over-expressed 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 (E-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of LGA of human origin.

RESEARCH USE

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

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-168423 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

LGA (E-15) 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

LGA (E-15) is also recommended for detection of LGA in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for LGA siRNA (h): sc-96242, LGA siRNA (m): sc-146716, LGA siRNA (r): sc-270167, LGA shRNA Plasmid (h): sc-96242-SH, LGA shRNA Plasmid (m): sc-146716-SH, LGA shRNA Plasmid (r): sc-270167-SH, LGA shRNA (h) Lentiviral Particles: sc-96242-V, LGA shRNA (m) Lentiviral Particles: sc-146716-V and LGA shRNA (r) Lentiviral Particles: sc-270167-V.

Molecular Weight of LGA: 66 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

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.

PROTOCOLS

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