

FPGT (Y-19): sc-79947

BACKGROUND

Guanylyltransferase enzymes transfer one molecule of GTP to another molecule and also function in the transfer of guanosine nucleotides to sugar molecules. The carbohydrate moieties that are generated are covalently attached to cell surfaces and are necessary to ensure a surface contour that satisfies a variety of physiological roles. L-fucose is an important sugar in complex carbohydrates that is frequently found on plant and mammalian N-linked glycans. FPGT (fucose-1-phosphate guanylyltransferase), also known as GFPP (GDP-L-fucose pyrophosphorylase), is a 594 amino acid cytoplasmic protein that catalyzes the formation of GDP-L-fucose from L-fucose-1-phosphate and GTP. FPGT functions to reutilize the L-fucose that is produced upon glycoprotein and glycolipid turnover.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: FPGT (human) mapping to 1p31.1; Fpgt (mouse) mapping to 3 H4.

SOURCE

FPGT (Y-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of FPGT of human origin.

STORAGE

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

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-79947 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FPGT (Y-19) is recommended for detection of FPGT 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).

FPGT (Y-19) is also recommended for detection of FPGT in additional species, including equine and canine.

Suitable for use as control antibody for FPGT siRNA (h): sc-75055, FPGT siRNA (m): sc-75056, FPGT shRNA Plasmid (h): sc-75055-SH, FPGT shRNA Plasmid (m): sc-75056-SH, FPGT shRNA (h) Lentiviral Particles: sc-75055-V and FPGT shRNA (m) Lentiviral Particles: sc-75056-V.

Molecular Weight of FPGT: 61 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.

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.