SANTA CRUZ BIOTECHNOLOGY, INC.

GAPT (T-13): sc-133365

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The Power to Question

BACKGROUND

GAPT (growth factor receptor-bound protein 2-binding adapter protein, transmembrane), also known as C5orf29, is a 157 amino acid single-pass membrane protein that belongs to the GAPT family. After stimulation through the B-cell receptor, GAPT negatively regulates B-cell proliferation and may play a role in B-cell marginal zone maintenance. GAPT is known to interact with GRB2 and is highly expressed in PBL and spleen but can also be detected in thymus at lower levels. Expression of GAPT has been confirmed in many B-cell lines, THP-1 and TY. The GAPT gene is conserved in chimpanzee, canine, bovine, mouse and rat, and maps to human chromosome 5q11.2. Chromosome 5 is associated with Cockayne syndrome through the ERCC8 gene and familial adenomatous polyposis through the adenomatous polyposis coli (APC) tumor suppressor gene. Treacher Collins syndrome is also chromosome 5-associated and is caused by insertions or deletions within the TCOF1 gene. Deletion of the p arm of chromosome 5 leads to cri du chat syndrome, while deletion of the q arm or of chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: GAPT (human) mapping to 5q11.2.

SOURCE

GAPT (T-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of GAPT of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-133365 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GAPT (T-13) is recommended for detection of GAPT of human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for GAPT siRNA (h): sc-91636, GAPT shRNA Plasmid (h): sc-91636-SH and GAPT shRNA (h) Lentiviral Particles: sc-91636-V.

Molecular Weight of GAPT: 25 kDa.

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) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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.