SANTA CRUZ BIOTECHNOLOGY, INC.

β-glucosidase 2 (P-17): sc-160381

BACKGROUND

β-glucosidase 2, also known as non-lysosomal glucosylceramidase (NLGase), Glucosylceramidase 2, GBA2 or AD035, is a 927 amino acid non-lysosomal glucosylceramidase that catalyzes glucosylceramide into ceramide and free glucose, and is suggested to play a role in carbohydrate transport and metabolism. A single-pass membrane protein, β-glucosidase 2 exists as three alternatively spliced isoforms that are widely expressed but found at highest levels in placenta, kidney, brain, skeletal muscle, kidney and heart, with low levels found in liver. β-glucosidase 2 activity has been linked to sphingomyelin generation and prevention of glycolipid accumulation. The gene encoding β-glucosidase 2 maps to human chromosome 9, which houses over 900 genes and comprises nearly 4% of the human genome.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: GBA2 (human) mapping to 9p13.3; Gba2 (mouse) mapping to 4 B1.

SOURCE

β-glucosidase 2 (P-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of β-glucosidase 2 of human origin.

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-160381 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

β-glucosidase 2 (P-17) is recommended for detection of β-glucosidase 2 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); non cross-reactive with β-glucosidase.

β-glucosidase 2 (P-17) is also recommended for detection of β-glucosidase 2 in additional species, including canine.

Suitable for use as control antibody for β-glucosidase 2 siRNA (h): sc-92737, β-glucosidase 2 siRNA (m): sc-145444, β-glucosidase 2 shRNA Plasmid (h): sc-92737-SH, β-glucosidase 2 shRNA Plasmid (m): sc-145444-SH, β-glucosidase 2 shRNA (h) Lentiviral Particles: sc-92737-V and β-glucosidase 2 shRNA (m) Lentiviral Particles: sc-145444-V.

Molecular Weight of β-glucosidase 2: 105 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.

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.