SANTA CRUZ BIOTECHNOLOGY, INC.

GDE6 (K-18): sc-246986

BACKGROUND

GDE6 (glycerophosphodiester phosphodiesterase 6), also known as GDPD4 (glycerophosphodiester phosphodiesterase domain containing 4) or UGPQ, is a 623 amino acid multi-pass membrane protein that belongs to the glycerophosphoryl diester phosphodiesterase family. Containing one GDPD domain, GDE6 exists as 2 alternatively spliced isoforms and is encoded by a gene that maps to human chromosome 11q13.5. Chromosome 11 houses over 1,400 genes and comprises nearly 4% of the human genome. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are associated with defects in genes that maps to chromosome 11.

REFERENCES

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3. Schuchman, E.H. 2007. The pathogenesis and treatment of acid sphingomyelinase-deficient Niemann-pick disease. J. Inherit. Metab. Dis. 30: 654-663.
4. Siem, G., et al. 2008. Jervell and Lange-nielsen syndrome in Norwegian children: aspects around cochlear implantation, hearing, and balance. Ear Hear. 29: 261-269.
5. Bhuiyan, Z.A., et al. 2008. An intronic mutation leading to incomplete skipping of exon-2 in KCNQ1 rescues hearing in Jervell and Lange-nielsen syndrome. Prog. Biophys. Mol. Biol. 98: 319-327.
6. Coldren, C.D., et al. 2009. Chromosomal microarray mapping suggests a role for BSX and Neurogranin in neurocognitive and behavioral defects in the 11q terminal deletion disorder (Jacobsen syndrome). Neurogenetics 10: 89-95.
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CHROMOSOMAL LOCATION

Genetic locus: GDPD4 (human) mapping to 11q13.5.

SOURCE

GDE6 (K-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of GDE6 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-246986 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GDE6 (K-18) is recommended for detection of GDE6 of 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).

Suitable for use as control antibody for GDE6 siRNA (h): sc-96397, GDE6 shRNA Plasmid (h): sc-96397-SH and GDE6 shRNA (h) Lentiviral Particles: sc-96397-V.

Molecular Weight of GDE6 isoforms: 72/61 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.

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.