SANTA CRUZ BIOTECHNOLOGY, INC.

NT5C3 (S-13): sc-104474

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Nucleotidases are hydrolytic enzymes that catalyze the hydrolysis of nucleotides into phosphates and nucleosides. NT5C3 (5'-nucleotidase, cytosolic III), also known as P5N1 or UMPH1, is a 336 amino acid protein that exists as multiple alternatively spliced isoforms which localize to either the cytoplasm or the endoplasmic reticulum. Expressed in an isoform-specific manner in lymphocytes and reticulocytes, NT5C3 belongs to the pyrimidine 5'-nucleotidase family and exists as a monomer which acts as both a nucleotidase and a phosphotransferase, effectively catalyzing the conversion of a 5'-ribonucleotide to a ribonucleoside and a free phosphate. Defects in the gene encoding NT5C3 are the cause of P5N deficiency, an autosomal recessive disorder that is associated with hemolytic anemia and is characterized by lead poisoning and learning difficulties.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: NT5C3 (human) mapping to 7p14.3; Nt5c3 (mouse) mapping to 6 B3.

SOURCE

NT5C3 (S-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of NT5C3 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-104474 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

NT5C3 (S-13) is recommended for detection of NT5C3 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).

Suitable for use as control antibody for NT5C3 siRNA (h): sc-89592, NT5C3 siRNA (m): sc-106313, NT5C3 shRNA Plasmid (h): sc-89592-SH, NT5C3 shRNA Plasmid (m): sc-106313-SH, NT5C3 shRNA (h) Lentiviral Particles: sc-89592-V and NT5C3 shRNA (m) Lentiviral Particles: sc-106313-V.

Molecular Weight of NT5C3: 38 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or Jurkat whole cell lysate: sc-2204.

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.