

NT5C1B (E-12): sc-168795

BACKGROUND

NT5C1B (cytosolic 5'-nucleotidase 1B), also known as AIRP (autoimmune infertility-related protein), is a 610 amino acid cytoplasmic protein that belongs to the 5'-nucleotidase type 3 family and exists as 4 alternatively spliced isoforms. As it dephosphorylates the 5' and 2'(3')-phosphates of deoxyribonucleotides, NT5C1B helps to regulate adenosine levels and is activated by ADP. While it is highly expressed in testis, placenta and pancreas, NT5C1B is expressed at lower levels in heart, kidney, liver and lung. The gene that encodes NT5C1B consists of more than 34,000 bases and maps to human chromosome 2p24.2. Chromosome 2 consists of 237 million bases, encodes over 1,400 genes and makes up approximately 8% of the human genome. A number of genetic diseases are linked to genes on chromosome 2 including Harlequin ichthyosis, sitosterolemia and Alström syndrome.

REFERENCES

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- Kellsell, D.P., et al. 2005. Mutations in ABCA12 underlie the severe congenital skin disease harlequin ichthyosis. *Am. J. Hum. Genet.* 76: 794-803.
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CHROMOSOMAL LOCATION

Genetic locus: NT5C1B (human) mapping to 2p24.2; Nt5c1b (mouse) mapping to 12 A1.1.

SOURCE

NT5C1B (E-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of NT5C1B 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-168795 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

NT5C1B (E-12) is recommended for detection of NT5C1B of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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 NT5C1A.

NT5C1B (E-12) is also recommended for detection of NT5C1B in additional species, including equine, canine and porcine.

Suitable for use as control antibody for NT5C1B siRNA (h): sc-94324, NT5C1B siRNA (m): sc-150080, NT5C1B shRNA Plasmid (h): sc-94324-SH, NT5C1B shRNA Plasmid (m): sc-150080-SH, NT5C1B shRNA (h) Lentiviral Particles: sc-94324-V and NT5C1B shRNA (m) Lentiviral Particles: sc-150080-V.

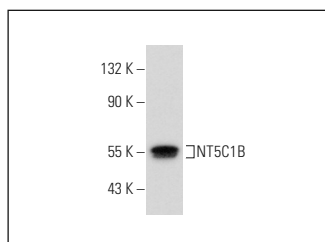
Molecular Weight of NT5C1B isoforms: 69/62/46/68 kDa.

Positive Controls: mouse testis extract: sc-2405.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



NT5C1B (E-12): sc-168795. Western blot analysis of NT5C1B expression in mouse testis tissue extract.

RESEARCH USE

For research use only, not for use in diagnostic procedures.