SANTA CRUZ BIOTECHNOLOGY, INC.

Aspartoacylase-3 (G-14): sc-167149

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Aspartoacylase-3 (ACY3), also known as aminoacylase-3, Aspartoacylase-2, acylase III or HCBP1 (hepatitis C virus core-binding protein 1), is a 319 amino acid protein that deacetylates mercapturic acids in the proximal tubules of the kidney, where it is predominantly expressed. A member of the aspA/astE family and Aspartoacylase subfamily, Aspartoacylase-3 localizes to the cytoplasm of S2 and S3 proximal tubules and to the apical domain of S1 proximal tubules. Aspartoacylase-3 is also expressed at low levels in stomach, testis, heart, brain, lung and liver, and may function as an HCV (hepatitis C virus) core binding protein. Aspartoacylase-3 is encoded by a gene that maps to human chromosome 11, which 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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CHROMOSOMAL LOCATION

Genetic locus: ACY3 (human) mapping to 11q13.2; Acy3 (mouse) mapping to 19 A.

SOURCE

Aspartoacylase-3 (G-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Aspartoacylase-3 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-167149 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Aspartoacylase-3 (G-14) is recommended for detection of Aspartoacylase-3 of mouse 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 Aspartoacylase.

Suitable for use as control antibody for Aspartoacylase-3 siRNA (h): sc-96717, Aspartoacylase-3 siRNA (m): sc-141304, Aspartoacylase-3 shRNA Plasmid (h): sc-96717-SH, Aspartoacylase-3 shRNA Plasmid (m): sc-141304-SH, Aspartoacylase-3 shRNA (h) Lentiviral Particles: sc-96717-V and Aspartoacylase-3 shRNA (m) Lentiviral Particles: sc-141304-V.

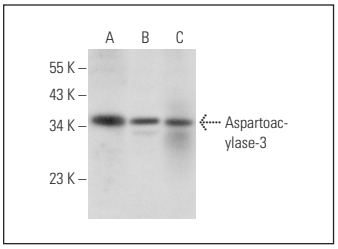
Molecular Weight of Aspartoacylase-3: 35 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210, c4 whole cell lysate: sc-364186 or human colon extract: sc-363757.

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



Aspartoacylase-3 (G-14): sc-167149. Western blot analysis of Aspartoacylase-3 expression in NIH/3T3 (**A**) and c4 (**B**) whole cell lysates and human colon tissue extract (**C**).

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.