



Aspartoacylase (m): 293T Lysate: sc-125004

BACKGROUND

Aspartoacylase, also known as ASPA, ACY2 or ASP, is a 313 amino acid protein that is expressed in liver, lung and kidney tissue, as well as in skeletal muscle and in cerebral white matter. Existing as a homodimer, Aspartoacylase functions to catalyze the deacetylation of N-acetylaspatic acid (NAA) (a protein whose hydrolysis is crucial to maintenance of intact white matter) to produce acetate and L-aspartate. Defects in the gene encoding Aspartoacylase are the cause of Canavan disease (CAND), which is a rare neurodegenerative condition that is characterized by white matter vacuolization and demyelination, resulting in a spongy deterioration of brain tissue. CAND is generally characterized by atonia of neck muscles, hypotonia, hyperextension of legs and flexion of arms, blindness, severe mental retardation, megaloccephaly and death.

REFERENCES

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8. Bitto, E., et al. 2007. Structure of Aspartoacylase, the brain enzyme impaired in Canavan disease. *Proc. Natl. Acad. Sci. USA* 104: 456-461.
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CHROMOSOMAL LOCATION

Genetic locus: *Acy3* (mouse) mapping to 19 A.

PRODUCT

Aspartoacylase (m): 293T Lysate represents a lysate of mouse Aspartoacylase transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

Aspartoacylase (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Aspartoacylase antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.