SANTA CRUZ BIOTECHNOLOGY, INC.

NAT-1 (h): 293T Lysate: sc-112994

BACKGROUND

Arylamine N-acetyltransferases (NAT-1 and NAT-2) catalyze N- or O-acetylation of heterocyclic and arylamine substrates in the detoxification of a wide array of drugs. Certain alleles causing high levels of N-acetyltransferase activity have been associated with colon and urinary bladder cancers, as NATs also bioactivate several known carcinogens. Both NAT-1 and NAT-2 are cytoplasmic proteins and play an active role in the detoxification of many arylamine and hydrazine drugs. N-acetylation polymorphism is determined by the level of NAT activity in liver tissues, and has been linked to the action and toxicity of drugs that contain amines.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: NAT1 (human) mapping to 8p22.

PRODUCT

NAT-1 (h): 293T Lysate represents a lysate of human NAT-1 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.

RESEARCH USE

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

APPLICATIONS

NAT-1 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive NAT-1 antibodies. Recommended use: 10-20 µl per lane.

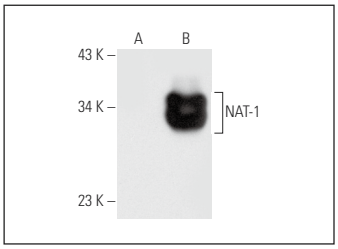
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-tranfected 293T cells.

NAT-1/2 (G-5): sc-137204 is recommended as a positive control antibody for Western Blot analysis of enhanced human NAT-1 expression in NAT-1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

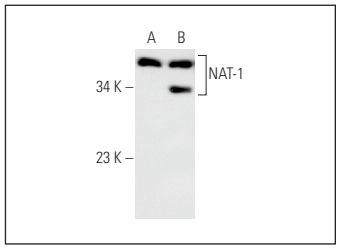
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



NAT-1/2 (G-5): sc-137204. Western blot analysis of NAT-1 expression in non-transfected: sc-117752 (**A**) and human NAT-1 transfected: sc-112994 (**B**) 293T whole cell lysates.



NAT-1/2 (G-5): sc-137204. Western blot analysis of NAT-1 expression in non-transfected: sc-117752 (**A**) and human NAT-1 transfected: sc-112994 (**B**) 293T whole cell lysates.

PROTOCOLS

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