

OAT (h): 293 Lysate: sc-110806

BACKGROUND

OAT (ornithine aminotransferase (mitochondrial), ornithine-oxo-acid aminotransferase) is a 439 amino acid protein encoded by the human gene OAT. OAT belongs to the class-III pyridoxal-phosphate-dependent aminotransferase family. OAT is usually found as a homotetramer in the mitochondrion matrix. OAT catalyzes the major catalytic reaction for ornithine. Ornithinemia, presumably due to deficiency of ornithine ketoacid aminotransferase (OAT), was found in nine patients with gyrate atrophy of the choroid and retina. The clinical history of gyrate atrophy is usually night blindness that begins in late childhood, accompanied by sharply demarcated circular areas of chorioretinal atrophy. During the second and third decades the areas of atrophy enlarge. The hepatic cleavage product, hepatic OAT, is formed by cleaving a 25 amino acid transit peptide from the N-terminus of the OAT precursor. The renal form is produced by cleaving a 35 amino acid transit peptide from the N-terminus.

REFERENCES

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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.

PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: OAT (human) mapping to 10q26.13.

PRODUCT

OAT (h): 293 Lysate represents a lysate of human OAT transfected 293 cells and is provided as 100  g protein in 200  l SDS-PAGE buffer.

APPLICATIONS

OAT (h): 293 Lysate is suitable as a Western Blotting positive control for human reactive OAT antibodies. Recommended use: 10-20  l per lane.

Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

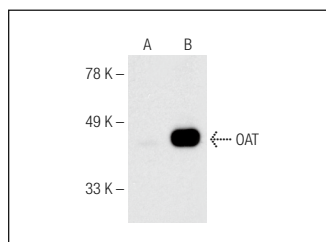
hepatic OAT (F-2): sc-374310 is recommended as a positive control antibody for Western Blot analysis of enhanced human OAT expression in OAT transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

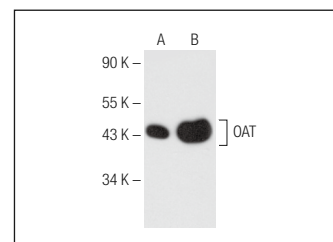
To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgG  BP-HRP: sc-516102 or m-IgG  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz[ ] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



hepatic OAT (F-2): sc-374310. Western blot analysis of OAT expression in non-transfected: sc-110760 (A) and human OAT transfected: sc-110806 (B) 293 whole cell lysates.



hepatic OAT (D-10): sc-376050. Western blot analysis of OAT expression in non-transfected: sc-110760 (A) and human OAT transfected: sc-110806 (B) 293 whole cell lysates.

RESEARCH USE

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