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OAT Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8897a

Product Information

Application	IHC-P, FC, IF, WB, E
Primary Accession	P04181
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	48535
Antigen Region	27-55

Additional Information

Gene ID	4942
Other Names	Ornithine aminotransferase, mitochondrial, Ornithine delta-aminotransferase, Ornithine--oxo-acid aminotransferase, Ornithine aminotransferase, hepatic form, Ornithine aminotransferase, renal form, OAT
Target/Specificity	This OAT antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 27-55 amino acids from the N-terminal region of human OAT.
Dilution	IHC-P~~1:100~500 FC~~1:10~50 IF~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	OAT Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	OAT
Function	Catalyzes the reversible interconversion of L-ornithine and 2-oxoglutarate to L-glutamate semialdehyde and L-glutamate.

Cellular Location Mitochondrion matrix

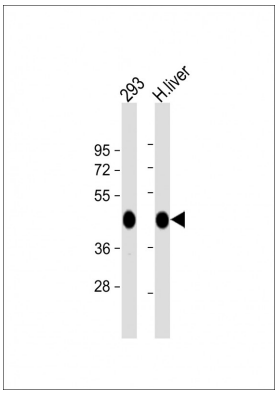
Background

OAT is the mitochondrial enzyme ornithine aminotransferase, which is a key enzyme in the pathway that converts arginine and ornithine into the major excitatory and inhibitory neurotransmitters glutamate and GABA.

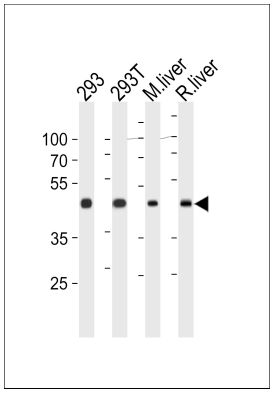
References

Michaud J., et.al., Am. J. Hum. Genet. 56:616-622(1995).

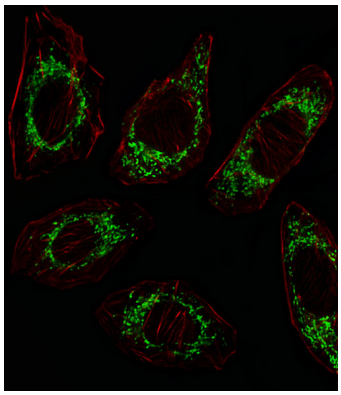
Images



All lanes : Anti-OAT Antibody (N-term) at 1:1000 dilution Lane 1: 293 whole cell lysate Lane 2: human liver lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 49 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

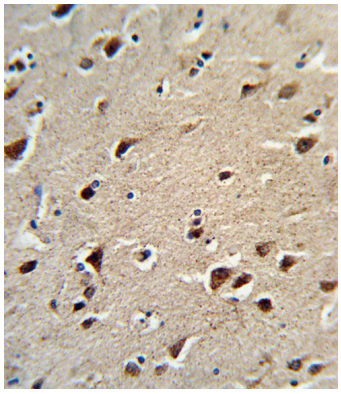


OAT Antibody (N-term) (Cat. #AP8897a) western blot analysis in 293,293T cell line ,mouse liver and rat liver tissue lysates (35ug/lane).This demonstrates the OAT antibody detected the OAT protein (arrow).

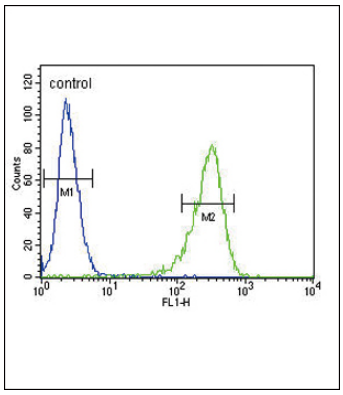


Fluorescent image of A549 cell stained with OAT Antibody (N-term)(Cat#AP8897a/SA100310AG).A549 cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with OAT primary antibody (1:25, 1 h at 37°C). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37°C).Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (7units/ml, 1 h at 37°C).OAT immunoreactivity is localized to Mitochondrion significantly.

Formalin-fixed and paraffin-embedded human brain tissue reacted with OAT Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use



of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



OAT Antibody (N-term) (Cat. #AP8897a) flow cytometric analysis of 293 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.