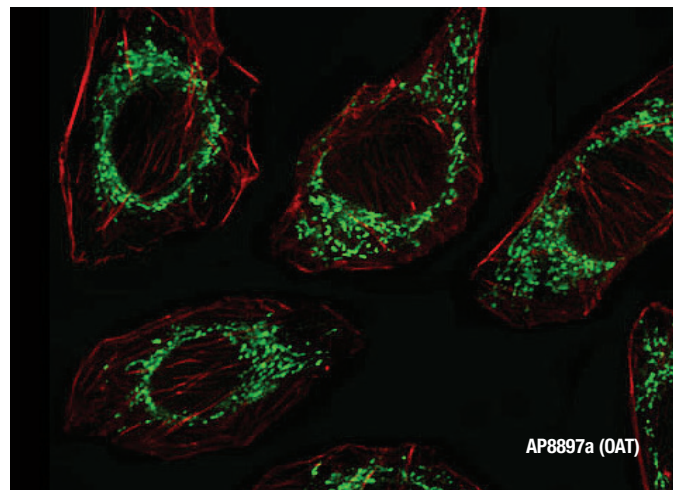


Introduction

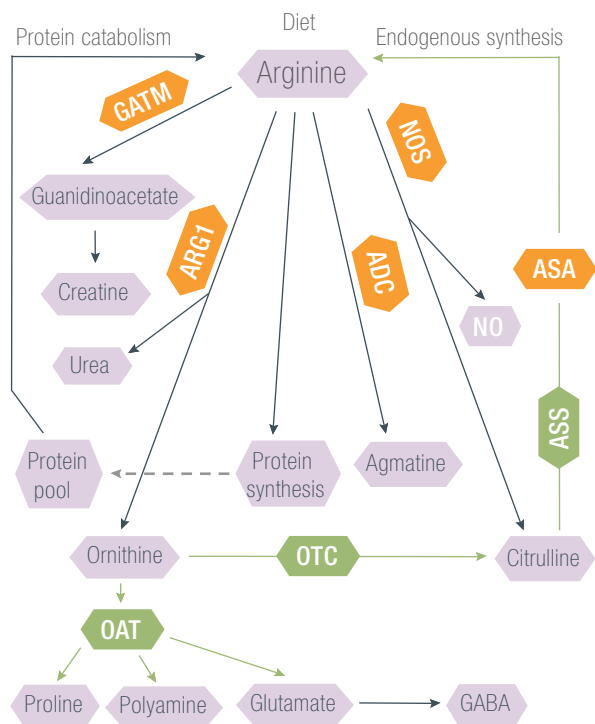
Ornithine aminotransferase (OAT) is a mitochondrial matrix enzyme that is the primary catabolic enzyme for the non-protein amino acid ornithine. It catabolizes ornithine to glutamate or proline (see model below). Ornithine is an important component of the urea cycle, which is responsible for reducing the nitrogen burden in the body by removing the toxic ammonia formed as a result of amino acid catabolism from the body by converting it to urea. Deficiency of ornithine aminotransferase in humans results in gyrate atrophy of the choroid and retina (GA), an autosomal recessive disorder characterized by ornithine accumulation and a progressive chorioretinal degeneration of unknown pathogenesis.

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



AP8897a (OAT)

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 is localized to mitochondrion.



Selected Abgent Products

CAT. #	TARGET NAME
AP16053a	CPS1 Antibody (N-term)
AP6928c	OTC Antibody (Center)
AP18166c	ORNT2 Antibody (Center)
AP6829c	ASS Antibody (Center)
AP8837a	ASL Antibody (N-term)
AP8976b	ARG1 Antibody (C-term)
AP14027b	ODC1 Antibody (C-term)
AP5316c	ABAT Antibody (Center)

Visual categorization

Target associated (orange)



Autophagy Stem Cell Neurodegeneration