10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Recombinant Anti-NAT1 Rabbit mAb

Catalog # AP95385

Product Information

Application	WB, FC, IF/IC
Primary Accession	P18440
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal
Calculated MW	33899

Additional Information

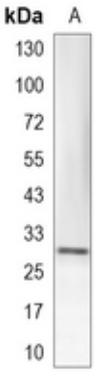
Gene ID	9
Other Names	AAC1; Arylamine N-acetyltransferase 1; Arylamide acetylase 1; Monomorphic arylamine N-acetyltransferase; MNAT; N-acetyltransferase type 1; NAT-1
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within human NAT1 protein. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) FC~~1:10~50 IF/IC~~N/A
Format	Liquid in PBS, pH 7.3, 50% glycerol, 0.05% BSA, and 0.05% Proclin300.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

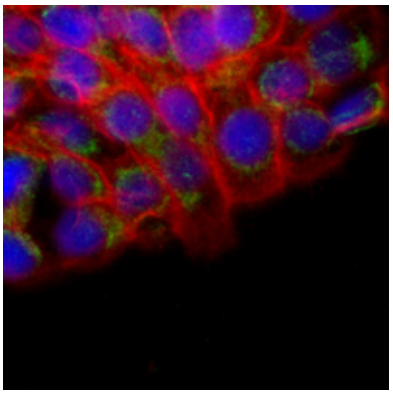
Name	NAT1
Synonyms	AAC1
Function	Xenobiotic-metabolizing enzyme that catalyzes both N- acetylation (usually detoxification) and O-acetylation (usually bioactivation) of a wide range of species-specific substrates including hydrazines, aromatic amine drugs and aromatic amine carcinogens (Probable) (PubMed:9168895). Transfers an acetyl group from acetyl- coenzyme A to arylamine and N-hydroxyarylamine acceptor substrates (Probable) (PubMed:9168895). Can also transfer an N-acetyl group from an N-hydroxy acetylamine to either N-hydroxyarylamine or arylamine in the absence of acetyl-coenzyme A (PubMed:9168895). Therefore, activates N-hydroxyarylamines to unstable acetoxy intermediates which decompose to electrophiles, bind to DNA, and lead to mutagenesis and carcinogenesis (PubMed:9168895). Plays a significant role in the bioactivation and detoxification of many drugs and carcinogens (Probable) (PubMed:9168895).

Cellular Location Cytoplasm {ECO:0000250|UniProtKB:P50294}.

Images



Western blot analysis of NAT1 expression in LnCaP (A) whole cell lysates. (Predicted band size: 34 kD; Observed band size: 30 kD)



Immunofluorescent analysis of NAT1 staining in LnCaP cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with an AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.