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NAT1 Rabbit mAb

Catalog # AP75770

Product Information

Application	WB, FC
Primary Accession	P18440
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	33899

Additional Information

Gene ID	9
Other Names	NAT1
Dilution	WB~~1:1000-1:5000 FC~~1:50-1:100
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

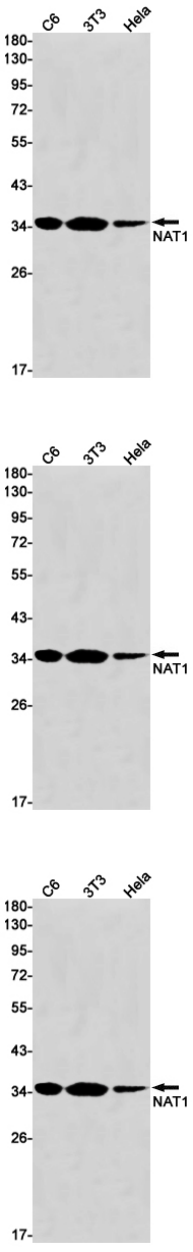
Name	NAT1
Synonyms	AAC1
Function	Xenobiotic-metabolizing enzyme that catalyzes both N- acetylation (usually detoxification) and O-acetylation (usually bioactivation) of a wide range of species-specific substrates including hydrazines, aromatic amine drugs and aromatic amine carcinogens (Probable) (PubMed:9168895). 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}.

Background

Participates in the detoxification of a plethora of hydrazine and arylamine drugs. Catalyzes the N- or O-acetylation of various arylamine and heterocyclic amine substrates and is able to bioactivate several known carcinogens.MiscellaneousNAT1 was historically considered to be monomorphic in nature but reports of allelic variations at the NAT1 locus suggest that it is a polymorphically expressed enzyme.CautionThe allelic variation Ile-149 designated as NAT1*17 is part of the NAT1*11 allelic variation as reported by the nomenclature committee.

Images



Western blot analysis of NAT1 in C6, 3T3, Hela lysates using NAT1 antibody.

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