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AR39050PU-L Human NAT1 (1-290, His-tag) - Purified

Alternate names: AAC, Arylamine N-acetyltransferase 1

Quantity: 0.25 mg

Concentration: 0.5 mg/ml (determined by Bradford assay)

Background: NAT1 belongs to the arylamine N-acetyltransferase family. It catalyzes N- or O-acetylation of heterocyclic and arylamine substrates in the detoxification of a wide array of drugs. Certain alleles causing high levels of N-acetyltransferase activity have been associated with colon and urinary bladder cancers, as NAT1 also bioactivate several known carcinogens. This enzyme helps metabolize drugs and other xenobiotics, and participates in the detoxification of a plethora of hydrazine and arylamine drugs.

Uniprot ID: P18440

NCBI: NP_000653

GeneID: 9

Species: Human

Source: E. coli

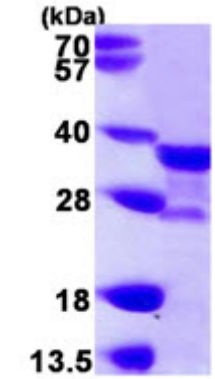
Format:
State: Liquid purified protein
Purity: >85%
Buffer System: 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol, 2mM DTT, 0.1M NaCl

Description: Recombinant human NAT1 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.
AA Sequence:
MGSSHHHHHH SSGLVPRGSH MDIEAYLERI GYKKSRNKLD LETLTDILQH QIRAVPFENL
NIHCGDAMDL GLEAIFDQVV RRNRGGWCLQ VNHLLYWALT TIGFETTMLG GYVYSTPAKK
YSTGMIHLLL QVTIDGRNYI VDAGFGRSYQ MWQPLELISG KDQPQVPCIF RLTEENGFWY
LDQIRREQYI PNEEFLHSDL LEDSKYRKIY SFTLKPRTIE DFESMNTYLQ TSPASVFTSK
SFCSLQTPDG VHCLVGFTLT HRRFNYKDNT DLIEFKTLSE EEIEKVLKNI FNISLQRKLV
PKHGDRFFTI
Molecular weight: 36.1 kDa (310aa), confirmed by MALDI-TOF

Storage: Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

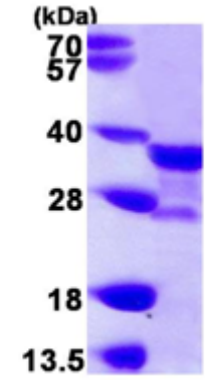
General Readings:
Gu J., et al. (2005) Multat Res. 581(1-2):97-104.
Kiss I., et al. (2004) Anticancer Res. 24(6):3965-70.

Pictures:



15% SDS-PAGE (3ug)

Recombinant human NAT1, 1-290 aa, His-tagged



15% SDS-PAGE (3ug)