

Recombinant human NAT1 protein

Catalog Number: ATGP1110

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-290aa

UniProt No.

P18440

NCBI Accession No.

NP_001153644.1

Alternative Names

Arylamine N-acetyltransferase 1, AAC1, MNAT, NAT-1, NATI

PRODUCT SPECIFICATION

Molecular Weight

36.1 kDa (310aa) confirmed by MALDI-TOF

Concentration

0.5mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol, 2mM DTT, 0.1M NaCl.

Purity

> 85% by SDS-PAGE

Tag

His-Tag

Application

SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

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. Recombinant human NAT1 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

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Amino acid Sequence

<MGSSHHHHHH SSGLVPRGSH> MDIEAYLERI GYKKS RNKLD LETLTDILQH QIRAVPFENL NIHCGDAMD L GLEAIFDQVV
RRNRGGWCLQ VNHLLYWALT TIGFETTMLG GYVYSTPAKK YSTGMIHLLL QVTIDGRNYI VDAGFGRSYQ MWQPLELISG
KDQPQVPCIF RLTEENGFYW LDQIRREQYI PNEEFLHSDL LEDSKYRKIY SFTLKPRTIE DFESMNTYLQ TSPASVFTSK
SFCSLQTPDG VHCLVGFTLT HRRFNYKDNT DLIEFKTLSE EEIEKVLKNI FNISLQRKLV PKHGDRFFT I

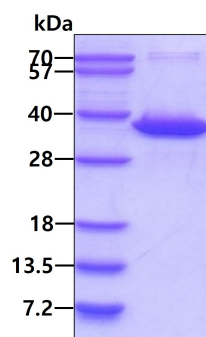
General References

Gu J., et al. (2005) *Multat Res.* 581(1-2):97-104.

Kiss I., et al. (2004) *Anticancer Res.* 24(6):3965-70.

DATA

SDS-PAGE



3 μ g by SDS-PAGE under reducing condition and visualized by coomassie blue stain.