

# 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.

# Recombinant human NAT1 protein

Catalog Number: ATGP1110

## 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

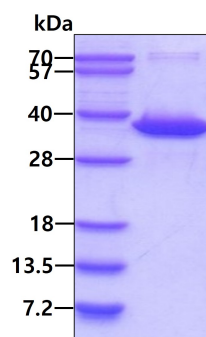
## General References

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 $\mu$ g by SDS-PAGE under reducing condition and visualized by coomassie blue stain.