

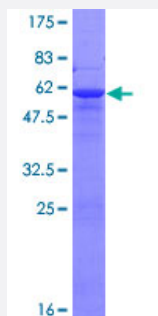
Full-Length

NAT1 (Human) Recombinant Protein (P01)

Catalog # H00000009-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human NAT1 full-length ORF (NP_000653.3, 1 a.a. - 290 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MDIEAYLERIGYKKS RNKLDLETLDILQHQRVAVPFENLNHCGDAMD LGLEAIFDQVVRNRGGW
CLQVNHLLYWALT TIGFETTMLGGYVYSTPAKKYSTGMIHLLQVTIDGRNYVDAGFGRSYQMWQP
LELISGKDQPQVPCVFRLTEENGFWYLDQIRREQYIPNEEFLHSDLLED SKYRKIYSFTLKPTIEDF
ESMNTYLQTSPSSVFTSKSFCSLQTPDGVHCLVGFTLTHRRFNYKDNTDLIEFKT LSEEEIEKVLK
NIFNISLQRKLV PKHGDRFFT I

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

60.3

Interspecies Antigen Sequence

Mouse (82); Rat (81)

Preparation Method

[in vitro wheat germ expression system](#)

Purification

Glutathione Sepharose 4 Fast Flow

Quality Control Testing

12.5% SDS-PAGE Stained with Coomassie Blue.

Storage Buffer

50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.

Storage Instruction

Store at -80°C. Aliquot to avoid repeated freezing and thawing.

Note

Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — NAT1

Entrez GeneID[9](#)**GeneBank Accession#**[NM_000662.4](#)**Protein Accession#**[NP_000653.3](#)**Gene Name**

NAT1

Gene Alias

AAC1, NATI

Gene Description

N-acetyltransferase 1 (arylamine N-acetyltransferase)

Omim ID[108345](#)**Gene Ontology**[Hyperlink](#)**Gene Summary**

This gene is one of two arylamine N-acetyltransferase (NAT) genes in the human genome, and is orthologous to the mouse and rat Nat2 genes. The enzyme encoded by this gene catalyzes the transfer of an acetyl group from acetyl-CoA to various arylamine and hydrazine substrates. This enzyme helps metabolize drugs and other xenobiotics, and functions in folate catabolism. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq]

Other Designations

N-acetyltransferase 1|OTTHUMP00000122488|arylamide acetylase 1 (N-acetyltransferase 1)|arylamine N-acetyltransferase 1

Publication Reference

- [Elucidation of xenobiotic metabolism pathways in human skin and human skin models by proteomic profiling.](#)

van Eijl S, Zhu Z, Cupitt J, Gierula M, Götz C, Fritsche E, Edwards RJ.

PLoS One 2012 Jul; 7(7):e41721.

Application: WB, Human, Human whole skin microsomal fraction

- [Phenotype of the Most Common "Slow Acetylator" Arylamine N-Acetyltransferase 1 Genetic Variant \(NAT1*14B\) is Substrate-Dependent.](#)

Millner LM, Doll MA, Cai J, States JC, Hein DW.

Drug Metabolism and Disposition 2012 Jan; 40(1):198.

Application: WB-Tr, Mouse, UV5/1A1 cells

Pathway

- [Caffeine metabolism](#)
- [Drug metabolism - other enzymes](#)
- [Metabolic pathways](#)

Disease

- [Abnormalities](#)
- [Adenocarcinoma](#)
- [Adenoma](#)
- [Alcoholism](#)
- [Alzheimer disease](#)
- [Amnesia](#)
- [Asthma](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Carcinoma](#)

- [Cardiovascular Diseases](#)
- [Cholangiocarcinoma](#)
- [Chromosome Aberrations](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Clubfoot](#)
- [Cognition Disorders](#)
- [Colitis](#)
- [Colon cancer](#)
- [Colonic Neoplasms](#)
- [Colonic Polyps](#)
- [Colorectal Neoplasms](#)
- [Congenital Abnormalities](#)
- [Connective Tissue Diseases](#)
- [Crohn Disease](#)
- [Dermatitis](#)
- [Diabetes Mellitus](#)
- [Disease Susceptibility](#)
- [DNA Damage](#)
- [Edema](#)
- [Endometriosis](#)
- [Esophageal Neoplasms](#)
- [Eye Diseases](#)
- [Fetal Diseases](#)
- [Genetic Predisposition to Disease](#)
- [Genomic Instability](#)

- [Head and Neck Neoplasms](#)
- [Hepatitis B](#)
- [Hepatitis C](#)
- [Hypersensitivity](#)
- [Infection](#)
- [Inflammation](#)
- [Jaw Abnormalities](#)
- [Kidney Failure](#)
- [Laryngeal Neoplasms](#)
- [Leukemia](#)
- [Limb Deformities](#)
- [Liver Neoplasms](#)
- [Lung carcinoma](#)
- [Lung Neoplasms](#)
- [Lupus Erythematosus](#)
- [Lymphoma](#)
- [Mesothelioma](#)
- [Micronuclei](#)
- [Motor Neuron Disease](#)
- [Multiple Chemical Sensitivity](#)
- [Multiple Myeloma](#)
- [Musculoskeletal Diseases](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Neuroblastoma](#)
- [Neuropsychological Tests](#)

- [Ovarian cancer](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Pleural Neoplasms](#)
- [Pregnancy Complications](#)
- [Premature Birth](#)
- [Prostate cancer](#)
- [Prostatic Hyperplasia](#)
- [Prostatic Neoplasms](#)
- [Pulmonary Disease](#)
- [Rectal Neoplasms](#)
- [Respiratory Tract Diseases](#)
- [Skin Diseases](#)
- [Spinal Dysraphism](#)
- [Stomach Neoplasms](#)
- [Urinary Bladder Neoplasms](#)