NAD(P) transhydrogenase subunit alpha Recombinant Protein | pntA recombinant protein

Recombinant Escherichia coli NAD(P) transhydrogenase subunit alpha

CATALOG #	HOST
AAA115309	**E Coli or Yeast or Baculovirus or Mammalian Cell**

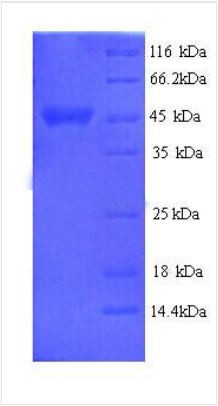
PRODUCT SYNONYMS

NAD(P) transhydrogenase subunit alpha; Recombinant Escherichia coli NAD(P) transhydrogenase subunit alpha; Nicotinamide nucleotide transhydrogenase subunit alpha; Pyridine nucleotide transhydrogenase subunit alpha; pntA recombinant protein

PRODUCT SPECIFICATIONS

Host	E Coli or Yeast or Baculovirus or Mammalian Cell
Purity/Purification	Greater or equal to 85% purity as determined by SDS-PAGE.
Form/Format	Lyophilized or liquid (Format to be determined during the manufacturing process)
Sequence Positions	1-401
Sequence	MRIGIPRERL TNETRVAATP KTVEQLLKLG FTVAVESGAG QLASFDDKAF VQAGAEIVEG NSVWQSEIIL KVNAPLDDEI ALLNPGTTLV SFIWPAQNPE LMQKLAERNV TVMAMDSVPR ISRAQSLDAL SSMANIAGYR AIVEAAHEFG RFFTGQITAA GKVPPAKVMV IGAGVAGLAA IGAANSLGAI VRAFDTRPEV KEQVQSMGAE FLELDFKEEA GSGDGYAKVM SDAFIKAEME LFAAQAKEVD IIVTT
Sequence Length	510
Preparation and Storage	Store at -20 degree C, for extended storage, conserve at -20 degree C or -80 degree C.

IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for pntA recombinant protein	The transhydrogenation between NADH and NADP is coupled to respiration and ATP hydrolysis and functions as a proton pump across the membrane.

References	Nucleotide sequence of the pntA and pntB genes encoding the pyridine nucleotide transhydrogenase of Escherichia coli.Clarke D.M., Loo T.W., Gillam S., Bragg P.D.Eur. J. Biochem. 158:647-653(1986) A mutation at Gly314 of the beta subunit of the Escherichia coli pyridine nucleotide transhydrogenase abolishes activity and affects the NADP(H) -induced conformational change.Ahmad S., Glavas N.A., Bragg P.D.Eur. J. Biochem. 207:733-739(1992) A 570-kb DNA sequence of the Escherichia coli K-12 genome corresponding to the 28.0-40.1 min region on the linkage map.Aiba H., Baba T., Fujita K., Hayashi K., Inada T., Isono K., Itoh T., Kasai H., Kashimoto K., Kimura S., Kitakawa M., Kitagawa M., Makino K., Miki T., Mizobuchi K., Mori H., Mori T., Motomura K., Nakade S., Nakamura Y., Nashimoto H., Nishio Y., Oshima T., Saito N., Sampei G., Seki Y., Sivasundaram S., Tagami H., Takeda J., Takemoto K., Takeuchi Y., Wada C., Yamamoto Y., Horiuchi T.DNA Res. 3:363-377(1996) The complete genome sequence of Escherichia coli K-12.Blattner F.R., Plunkett G. III, Bloch C.A., Perna N.T., Burland V., Riley M., Collado-Vides J., Glasner J.D., Rode C.K., Mayhew G.F., Gregor J., Davis N.W., Kirkpatrick H.A., Goeden M.A., Rose D.J., Mau B., Shao Y.Science 277:1453-1462(1997) Highly accurate genome sequences of Escherichia coli K-12 strains MG1655 and W3110.Hayashi K., Morooka N., Yamamoto Y., Fujita K., Isono K., Choi S., Ohtsubo E., Baba T., Wanner B.L., Mori H., Horiuchi T.Mol. Syst. Biol. 2:E1-E5(2006) Topological analysis of the pyridine nucleotide transhydrogenase of Escherichia coli using proteolytic enzymes.Tong R.C., Glavas N.A., Bragg P.D.Biochim. Biophys. Acta 1080:19-28(1991) Global topology analysis of the Escherichia coli inner membrane proteome.Daley D.O., Rapp M., Granseth E., Melen K., Drew D., von Heijne G.Science 308:1321-1323(2005) X-ray structure of domain I of the proton-pumping membrane protein transhydrogenase from Escherichia coli.Johansson T., Oswald C., Pedersen A., Toernroeth S., Okvist M., Karlsson B.G., Rydstroem J., Krengel U.J. Mol. Biol. 352:299-312(2005) Structure determination of a transient complex by NMR using paramagnetic distance restraints - the complex of the soluble domains of Escherichia coli transhydrogenase.Johansson T., Pedersen A., Leckner J., Karlsson B.G.Submitted (MAY-2005) to the PDB data bank

NCBI AND UNIPROT INFORMATION

NCBI GI #	16129561
NCBI GeneID	946628
NCBI Accession #	NP_416120.1
NCBI GenBank Nucleotide #	NC_000913.3
UniProt Accession #	P07001; P76888
Molecular Weight	44.8 kDa
NCBI Official Full Name	pyridine nucleotide transhydrogenase, alpha subunit
NCBI Official Symbol	pntA
NCBI Official Synonym Symbols	ECK1598; JW1595
NCBI Protein Information	pyridine nucleotide transhydrogenase, alpha subunit
UniProt Protein Name	NAD(P) transhydrogenase subunit alpha
UniProt Gene Name	**pntA**
UniProt Entry Name	PNTA_ECOLI

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: https://www.aaabiotech.com/pnta-recombinant-protein-e-coli/115309