

Recombinant E.coli NanA, His-tagged

Cat. No. nanA-983E **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant E.coli nanA protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography(1-297aa).
Species	E.coli
Source	E.coli
Description	NanA, also known as N-acetylneuraminatylase, belongs to the family of lyases, specifically the oxo-acid-lyases, which cleave carbon-carbon bonds. NanA catalyzes the cleavage of N-acetylneuraminic acid (sialic acid) to form pyruvate and N-acetyl-D-mannosamine. This protein was inhibited by reduction with NaBH ₄ in the presence of the substrate, indicating that it belongs to the Schiff-base-forming Class I aldolases. NanA was strongly inhibited by Cu ²⁺ ions, p-chloromercuribenzoate and N-bromosuccinimide, and also inhibited competitively by the reaction product, pyruvate, and its structurally related compounds, dihydroxyacetone and DL-glyceraldehyde.
Form	Liquid. 20mM Tris-HCl buffer (pH8.0) containing 20% glycerol
Molecular Weight	34.7 kDa (317aa) confirmed by MALDI-TOF
Purity	> 95% by SDS - PAGE
Concentration	1 mg/ml (determined by Bradford assay)
Sequences of amino	MGSSHHHHHH SSGLVPRGSH MATNLRGVMA ALLTPFDQQQ ALDKASLRRL

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

acids

VQFNIQQGID GLYVGGSTGE AFVQSLSERE QVLEIVAEAEAKGKIKLIAHV
 GCVSTAESQQ LAASAKRYGF DAVSAVTPFY YPFSFEEHCD HYRAIDSAD
 GLPMVVYNIP ALSGVKLTLD QINTLVTLPGVGALKQTSGD LYQMEQIRRE
 HPDLVLYNGY DEIFASGLLA GADGGIGSTY NIMGWRYQGI VKALKEGDIQ
 TAQKLQTECN KVIDLLIKTGVFRGLKTVLH YMDVVSPLC RKPFGPVDEK
 YLPELKALAQ QLMQERG

Storage

Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

GENE INFORMATION
Gene Name

[nanA N-acetylneuraminate lyase \[Escherichia coli str. K-12 substr. MG1655 \]](#)

Synonyms

nanA, ECK3214; JW3194; npl; N-acetylneuraminatelyase; NP_417692.1; EC 4.1.3.3; N-acetylneuraminatelyase (aldolase); catabolism of sialic acid; not K-12?

Gene ID

947742

Protein Refseq

[NP_417692](#)