

32-2580: NANA Recombinant Protein

Alternative Name : N-acetylneuraminate lyase, N-acetylneuraminate pyruvate-lyase, N-acetylneuraminic acid aldolase, NALase, Sialate lyase, Sialic acid aldolase, Sialic acid lyase, nanA, npl, b3225, JW3194.

Description

Source : Escherichia Coli. NANA produced in E.Coli is a single, non-glycosylated polypeptide chain containing 317 amino acids (1-297 a.a.) and having a molecular mass of 34.7kDa. NANA is fused to a 20 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques. N-acetylneuraminate lyase (NanA) is a member of a 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. NanA is inhibited by reduction with NaBH₄ in the presence of the substrate, which indicates that it belongs to the Schiff-base-forming Class I aldolases. NanA is strongly inhibited by Cu²⁺ ions, p-chloromercuribenzoate and N-bromosuccinimide, it is also inhibited competitively by the reaction product, pyruvate, and its structurally related compounds, dihydroxyacetone and DL-glyceraldehyde.

Product Info

Amount : 20 µg
Purification : Greater than 95% as determined by SDS-PAGE.
Content : The NANA protein solution (1mg/ml) 20mM Tris-HCl buffer (pH8.0) and 20% glycerol.
Storage condition : NANA E.Coli Recombinant although stable at 4°C for 1 week, should be stored below -18°C. Please prevent freeze thaw cycles.
Amino Acid : MGSSHHHHHH SSGLVPRGSH MATNLRGVMA ALLTPFDQQQ ALDKASLRRL VQFNIQQGID
 GLYVGGSTGE AFDVQLSERE QVLEIVAEAA KGKIKLIAHV GCVSTAESQQ LAASAKRYGF DAVSAVTPFY
 YPFSFEEHCD HYRAIIDSAD GLPMVVYNIP ALSGVKLTLD QINTLVTLPGVGALKQTSGD LYQMEQIRRE
 HPDLVLYNGY DEIFASGLLA GADGGIGSTY NIMGWRYQGI VKALKEGDIQ TAQKLQTECN KVIDLLIKTG
 VFRGLKTVLH YMDVVSVPCL RKPFPGPVDEK YLPELKALAQ QLMQERG.

