

## 32-2580: NANA Recombinant Protein

**Alternative Name** N-acetylneuraminase lyase, N-acetylneuraminase 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-acetylneuraminase 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 NaBH<sub>4</sub> in the presence of the substrate, which indicates that it belongs to the Schiff-base-forming Class I aldolases. NanA is strongly inhibited by Cu<sup>2+</sup> 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 AFVQSLSERE QVLEIVAEAA KGIKLIHAV GCVSTAESQQ LAASAKRYGF DAVSAVTPFY  
YPFSFEEHCD HYRAIIDSAD GLPMVVYNIP ALSGVKLTLD QINTLVTLPGVGALKQTSGD LYQMEQIRRE  
HPDLVLYNGY DEIFASGLLA GADGGIGSTY NIMGWRYQGI VKALKEGDIQ TAQKLQTECN KVIDLLIKTG  
VFRGLKTVLH YMDVVSVPLC RKPFGPVDEK YLPELKALAQ QLMQERG.

