

**NANS, 1-359aa, Human, His tag, E.coli**

**Cat.NO.: TP03091**

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3th Edition

**Synonyms:**Sialic acid synthase, SAS, N acetylneuraminase synthase

**Description:**NANS, also known as SAS, is a 359 amino acid protein that contains one AFP (antifreeze proteins)-like domain and functions in the biosynthesis of sialic acids. Expressed ubiquitously, NANS enzymatically catalyzes the H<sub>2</sub>O-dependent formation of N-acetylneuraminic acid (Neu5Ac) and 2-keto-3-deoxy-D-glycero-D-galactononic acid (KDN), both of which are sialic acids. NANS uses N-acetylmannosamine 6-phosphate as a substrate for Neu5Ac synthesis and mannose 6-phosphate as a substrate for KDN synthesis.

**Form:**Liquid. In 20 mM Tris-HCl buffer (pH8.0) containing 0.1M NaCl,1mM DTT, 10% glycerol

**Molecular Weight:**42.4 kDa (379aa) confirmed by MALDI-TOF

**Sequences:**

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MGSSHHHHHHSSGLVPRGSHMPLELELCPGRWVGGQHPCFIIAEIGQNHQGDLDVAKRMIRMAKECGADCAKFQ
KSELEFKFNRKALERPYTSKHSWGKTYGEHKRHLEFSHDQYRELQRYAEEVGIFFTASGMDEMAVEFLHELNVPF
FKVSGSDTNNFPYLEKTAKKGRPMVISSGMQSMDTMKQVYQIVKPLNPNFCFLQCTSAYPLQPEDVNLRVISEYQK
LFPDPIGYSGHETGIAISVAAVALGAKVLERHITLTKTWKGS DHSASLEPGELAE LVRVRLVERALGSPTKQLLPCE
MACNEKLGKSVVAKVKIPEGTILTMMLTVKVGEPKGYPPEDIFNLVGKKVLVTVEEDDTIMEELVDNHGKKIKS
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**Purity:**> 95% by HPLC

**Concentration:**0.5 mg/ml (determined by Bradford assay)

**Endotoxin Level:**<1.0 EU per 1 ug of protein (determined by LAL method)

**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.