



Recombinant Influenza A virus Nucleoprotein (NP)

Product Code	CSB-EP304802IMB
Relevance	Encapsidates the negative strand viral RNA, protecting it from nucleases. The encapsidated genomic RNA is termed the ribonucleoprotein (RNP) and serves as template for transcription and replication. The RNP needs to be localized in the nucleus to start an infectious cycle, but is too large to diffuse through the nuclear pore complex. NP comprises at least 2 nuclear localization signals and is responsible of the active RNP import into the nucleus through the cellular importin alpha/beta pathway. Later in the infection, nucleus export of RNP are mediated through viral proteins NEP interacting with M1 which binds nucleoproteins. It is possible that the nucleoprotein binds directly exportin-1 (XPO1) and plays an active role in RNP nuclear export. M1 interaction with RNP seems to hide nucleoprotein's nuclear localization signals. Soon after a virion infects a new cell, M1 dissociates from the RNP under acidification of the virion driven by M2 protein. Dissociation of M1 from RNP unmask nucleoprotein's nuclear localization signals, targeting the RNP to the nucleus (By similarity).
Abbreviation	Recombinant Influenza A virus NP protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P69291
Alias	Nucleocapsid protein Short name: Protein N
Product Type	Recombinant Protein
Immunogen Species	Influenza A virus (strain A/Beijing/353/1989 H3N2)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	MASQGTKRSYEQMETDGERQNATEIRASVGKMIDGIGRFYIQMCTELKLSDYE GRLIQNSLTVERMVLSAFDERRNRYLEEHP SAGKDPKKTGGPIYKRVGGRWM RELVLYDKEEIRRIWRQANNGDDATRGLTHMMIWHNSLNDDTTYQRTRALVRT GMDPRMCSLMQGSTLPRRSGAAGAAVKGIGTMVMELIRMIKRGINDRNFWRG ENGRKTRSAYERM CNILKGKFQTAQRAMMDQVRESRNP GNAEIEDLIFSAR SALILRGSVAHK SCLPACVYGPAVSSGYDFEKEGYSLVGIDPFKLLQNSQVYSL IRPNENPAHKS QLVWMACHSAAFEDLRLLSFIRG TKVSPRGKLSTRGVQIASN ENMDNME SSTLELRSRYWAIRTRSGGNTNQQRASAGQISVQPTFSVQRNLPF EKSTVMAAFTG NTEGRTSDMRAE IIRMMEGAKPEEV SFRGRGVFELSDEKAT NPIVPSFDMSNEGSYFFGDNAEEYDN
Research Area	Microbiology
Source	E.coli
Target Names	NP
Protein Names	Recommended name: Nucleoprotein Alternative name(s): Nucleocapsid protein Short name= Protein N

