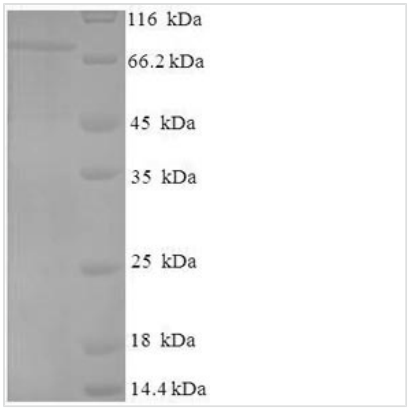
Recombinant Influenza A virus Nucleoprotein (NP)

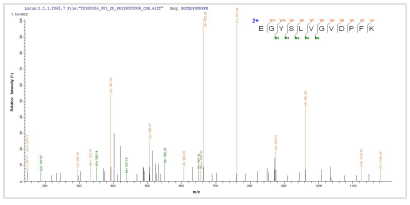
Product Code	CSB-EP325878IMI
Relevance	Encapsidates the negative strand viral RNA, protecting it from nucleases. The encapsidated genomic RNA is termed the ribonucleoprotein (RNP) and serves as tplate for transcription and replication. The RNP needs to be localized in the nucleus to start an infectious 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 ses 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 .
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.	P16980
Alias	Nucleocapsid protein ;Protein N
Product Type	Recombinant Protein
Immunogen Species	Influenza A virus (strain A/Equine/Prague/1/1956 H7N7)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	MASQGTKRPYEQMETGGERQNATEIRASVGKMVGGIGRFYIQMCTELKLNDY EGRLIQNSITIEKMVLSAFDERRNKYLEEHPNTGKDPKKTGGPIYRKREGKWIR ELILYDKEEIRRIWRQANNGEDATAGLTHLMIWHSNLNDATYQRTRALVRTGM DPRMCSLMQGSTLPRRSGAAGAAVKGIGTMVMELIRMIKRGINDRNFWRGEN GRKTRIAYERMCNILKGKFQTAAQRAMMDQVRESRNPGNAEIEDLIFLARSALI LRGSVAHKSCLPACVYGLIVASGYDFEREGYSLVGVDPFKLLQNSQIFSLIRPN ENPAHKSQLVWMACHSAAFEDLRVSSFIRGTKVIPRGQLSTRGIQIASNENME TIDSNTLELRSRYWAIRTKSGGNTSQQKASAGQISVQPTFSVQRNLPFERTTIM AAFTGNNEGRTSDMRTEIIRMMENAKPDDVSFQGRGVFELSDEKATNPIVPSF DMSKEGSYFFGDNAEEFDN
Lead Time	Delivery time may differ from different purchasing way or location, please kindly consult your local distributors for specific delivery time.
Research Area	Others
Source	E.coli
Gene Names	NP
Expression Region	1-498aa

Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-SUMO-tagged
Mol. Weight	72.2kDa
Protein Description	Full Length

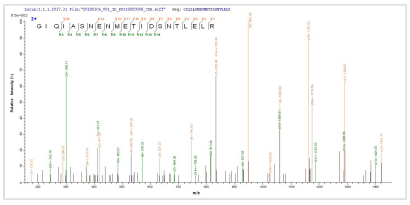
Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.



Based on the SEQUEST from database of E.coli host and target protein, the LC-MS/MS Analysis result of CSB-EP325878IMI could indicate that this peptide derived from E.coli-expressed Influenza A virus (strain A/Equine/Prague/1/1956 H7N7) NP.



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Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.