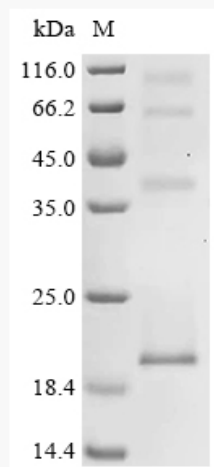


# for research use only

## Certificate of Analysis

|                     |  |  |  |
|---------------------|--|--|--|
| Product Name        | Recombinant Influenza A virus Matrix protein 2 (M)   |  |  |
| Catalog Number      | AAA26944   |  |  |
| Expression host     | in vitro E.coli expression system  |  |  |
| Tag Info            | N-terminal 6xHis-tagged  |  |  |
| Buffer              | Lyophilized from a 0.2 μ m sterile filtered 20 mM Tris-HCl, 0.15 M NaCl, 0.05% Brij78, 6% Trehalose, pH 8.0<br><br>The volume before lyophilization is 122 μ l/vial,2 vials.   |  |  |
| 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℃/-80℃. Our default final concentration of glycerol is 50%. Customers could use it as reference. |  |  |
| Batch Number        | DD05839c3g0  |  |  |
| Nature              | Influenza A virus M-(AA 1-97)-A4GCM0-Full Length   |  |  |
| Purification        | Affinity purified using IMAC   |  |  |
| Recommended Storage | Short term   | 2 to 8 °C, one week after reconstitution   |  |
|                     | Long term  | -20 to -80 °C, twelve months from the date of receipt                                |  |
| Form                | Lyophilized powder   |  |  |
| Date of detection   | 2023.12.20   |  |  |
| Test Items          | Specifications   |  | Results  |
| Purity              | ≥90%,by SDS-PAGE quantitative densitometry by Coomassie Blue Staining.   |  | 90%  |
| Molecular Weight    | Predicted band size: 15.2 kDa  |  | Observed band size: 20&40&60&100 kDa<br><br>It is speculated that the protein f orms multimer structure. |

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|                                   |  |      |
|-----------------------------------|--|------|
| <b>Electrophoretic parameters</b> | (Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel. Boiling SDS-treated samples may result in membrane protein aggregation. Incubation at 37 °C for 10 min is an effective alternative.   |      |
| <b>Aseptic Processing</b>         | <p>Lyophilized protein has been sterile filtered prior to lyophilization.</p> <p>However, the lyophilization process could potentially compromise sterility and please follow the instruction below if customers need a sterile filtered protein.</p> <p>Please sterile filter reconstituted lyophilized proteins with a 0.22µm filter in a clean bench (or other sterile environment) after reconstitution.</p> <p>Customers could use it as reference.</p> |      |
| <b>Endotoxin Level</b>            | <1.0 EU per 1µg of the protein by the LAL method.  | pass |
| <b>Activity</b>                   | Not tested   |      |
| <b>Conclusion</b>                 | pass   |      |

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**Datasheet**

|                        |   |
|------------------------|---|
| <b>Product Name</b>    | Recombinant Influenza A virus Matrix protein 2 (M)  |
| <b>Catalog Number</b>  | <b>MBS7019655</b>   |
| <b>Expression host</b> | <i>in vitro E.coli expression system</i>  |
| <b>Tag Info</b>        | N-terminal 6xHis-tagged   |
| <b>Buffer</b>          | Lyophilized from a 0.2 $\mu$ m sterile filtered 20 mM Tris-HCl, 0.15 M NaCl, 0.05% Brij78, 6% Trehalose, pH 8.0<br><br>The volume before lyophilization is 122 $\mu$ l/vial, 2 vials.   |
| <b>Storage</b>         | Store at -20°C, for extended storage, conserve at -20°C or -80°C.   |
| <b>Notes</b>           | Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.   |
| <b>Relevance</b>       | Forms a proton-selective ion channel that is necessary for the efficient release of the viral genome during virus entry. After attaching to the cell surface, the virion enters the cell by endocytosis. Acidification of the endosome triggers M2 ion channel activity. The influx of protons into virion interior is believed to disrupt interactions between the viral ribonucleoprotein (RNP), matrix protein 1 (M1), and lipid bilayers, thereby freeing the viral genome from interaction with viral proteins and enabling RNA segments to migrate to the host cell nucleus, where influenza virus RNA transcription and replication occur. Also plays a role in viral proteins secretory pathway. Elevates the intravesicular pH of normally acidic compartments, such as trans-Golgi network, preventing newly formed hemagglutinin from premature switching to the fusion-active conformation. |
| <b>AA sequence</b>     | MSLLTEVETPIRNEWGCRCNGSSDPLVIAASHIGILHLILWILDRLLFKCIYRRFKY<br>GLKRG PSTEGVPESMREEYRKEQSAVDADDGHFVNIEPE   |