

## Active Recombinant Influenza A H5N1 (A/Indonesia/5/2005) HA-specific B cell probe Protein (Met1-Gly519) (Tyr 107 Phe, Ser 341 Thr), His-tagged

**Cat. No.** HA-4892H    **Lot. No.** (See product label)

### SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
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| <b>Product Overview</b> | A DNA sequence encoding the Influenza A virus (A/Indonesia/5/2005(H5N1)) hemagglutinin (AHJ09886.1)(Met1-Ile519, with mutations Tyr 107 Phe, Ser 341 Thr, and aa 342-345 deleted), termed as HA, was expressed with a polyhistidine tag at the C-terminus.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Species</b>          | H5N1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Source</b>           | Insect Cells                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>ProteinLength</b>    | Met1-Gly519                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Description</b>      | The influenza viral Hemagglutinin (HA) protein is a homo trimer with a receptor binding pocket on the globular head of each monomer. HA has at least 18 different antigens. These subtypes are named H1 through H18. HA has two functions. Firstly, it allows the recognition of target vertebrate cells, accomplished through the binding to these cells' sialic acid-containing receptors. Secondly, once bound it facilitates the entry of the viral genome into the target cells by causing the fusion of host endosomal membrane with the viral membrane. The influenza virus Hemagglutinin (HA) protein is translated in cells as a single protein, HA, or hemagglutinin precursor protein. For viral activation, hemagglutinin precursor protein (HA) must be cleaved by a trypsin-like serine endoprotease at a specific site, normally coded for by a single basic amino acid (usually arginine) between the HA1 and HA2 domains of the protein. After |

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|                             |                                                                                                                                                                                                                                      |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                             | cleavage, the two disulfide-bonded protein domains produce the mature form of the protein subunits as a prerequisite for the conformational change necessary for fusion and hence viral infectivity.                                 |
| <b>Predicted N Terminal</b> | Asp 17                                                                                                                                                                                                                               |
| <b>Form</b>                 | Lyophilized from sterile 20 mM Tris, 500 mM NaCl, pH 7.4.<br>Please contact us for any concerns or special requirements.<br>Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. |
| <b>Bio-activity</b>         | Testing in progress                                                                                                                                                                                                                  |
| <b>Molecular Mass</b>       | The recombinant hemagglutinin of Influenza A virus (A/Indonesia/5/2005(H5N1)) consists of 510 amino acids and predicts a molecular mass of 58.2 kDa.                                                                                 |
| <b>Endotoxin</b>            | < 1.0 EU per µg protein as determined by the LAL method.                                                                                                                                                                             |
| <b>Purity</b>               | > 85 % as determined by SDS-PAGE.                                                                                                                                                                                                    |
| <b>Stability</b>            | Samples are stable for up to twelve months from date of receipt at -20°C to -80°C                                                                                                                                                    |
| <b>Storage</b>              | Store it under sterile conditions at -20°C to -80°C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.                                                                         |
| <b>Reconstitution</b>       | It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 ug/ul. Centrifuge the vial at 4°C before opening to recover the entire contents.                                                        |
| <b>Shipping</b>             | In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature.<br>Bulk packages of recombinant proteins are provided as frozen liquid. They are                                       |

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shipped out with blue ice unless customers require otherwise.

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