Active Recombinant Influenza A H1N1 (A/New Caledonia/20/1999) HA-specific B cell probe Protein (Met1-Gly519) (Y108F), His-tagged

Cat. No. HA-4890H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	A DNA sequence encoding the extracellular domain of Influenza A virus (A/New Caledonia/20/1999 (H1N1)) hemagglutinin (ACP41105.1) (Met1-Val519) with mutations (Y108F, and aa 339-342 SIQS→QRET), was expressed with a polyhistidine tag at the C-terminus.
Species	H1N1
Source	Insect Cells
ProteinLength	Met1-Gly519
Description	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.
Predicted N Terminal	Asp 18
Form	Lyophilized from sterile 20 mM Tris, 500 mM NaCl, pH 7.4. Please contact us for any concerns or special requirements. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.
Bio-activity	Testing in progress
Molecular Mass	The recombinant hemagglutinin of Influenza A virus (A/New Caledonia/20/1999 (H1N1)) consists of 513 amino acids and predicts a molecular mass of 58 kDa.
Endotoxin	< 1.0 EU per μg protein as determined by the LAL method.
Purity	> 95 % as determined by SDS-PAGE.
Stability	Samples are stable for up to twelve months from date of receipt at -20°C to -80°C
Storage	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.
Reconstitution	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.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. 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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