

## DESCRIPTION

<b>Species Reactivity</b>	Influenza A Virus H1N1
<b>Specificity</b>	Detects Influenza A Virus H1N1 Hemagglutinin in direct ELISA.
<b>Source</b>	Recombinant Monoclonal Rabbit IgG Clone # 2908F
<b>Purification</b>	Protein A or G purified from cell culture supernatant
<b>Immunogen</b>	Human embryonic kidney cell, HEK293-derived influenza a virus H1N1 Hemagglutinin with a C-terminal 6-His tag Met1-Gln529 Accession # YP_009118626
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose.

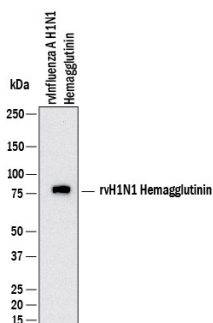
## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	Recommended Sample Concentration	
<b>Western Blot</b>	1 µg/mL	rvInfluenza A H1N1 Hemagglutinin
<b>Immunocytochemistry</b>	3-15 µg/mL	Immersion fixed CHO transfected cells (positive) and absent in Wild type CHO (negative) cells
<b>Simple Western</b>	25 µg/mL	rvInfluenza A H1N1 Hemagglutinin

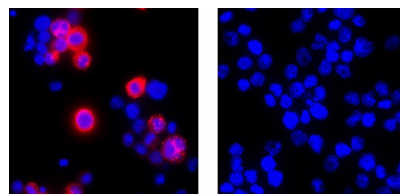
## DATA

### Western Blot



**Detection of Influenza A Virus H1N1 Hemagglutinin by Western Blot.** Western blot shows lysates of rvInfluenza A H1N1 Hemagglutinin. PVDF membrane was probed with 1 µg/mL of Rabbit Anti-Influenza A Virus H1N1 Hemagglutinin Monoclonal Antibody (Catalog # MAB113961) followed by HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # HAF008). A specific band was detected for Hemagglutinin at approximately 75 kDa (as indicated). This experiment was conducted under reducing conditions and using [Western Blot Buffer Group 1](#).

### Immunocytochemistry

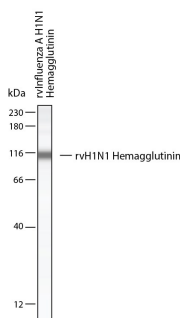


Transfected (Positive) cells

WT CHO (Negative) cells

**Detection of Hemagglutinin in CHO transfected cells (positive) and Wild type CHO (negative) cells.** Hemagglutinin was detected in immersion fixed CHO Chinese hamster ovary transfected cells (positive) and absent in Wild type CHO Chinese hamster ovary cells (negative) using Rabbit Anti-Influenza A Virus H1N1 Hemagglutinin Monoclonal Antibody (Catalog # MAB113961) at 3 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rabbit IgG Secondary Antibody (red; Catalog # NL004) and counterstained with DAPI (blue). Specific staining was localized to cell cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

### Simple Western



**Detection of Influenza A Virus H1N1 Hemagglutinin by Simple Western™.** Simple Western lane view shows lysates of rvInfluenza A H1N1 Hemagglutinin, loaded at 200 ng/mL. A specific band was detected for Hemagglutinin at approximately 111 kDa (as indicated) using 25 µg/mL of Rabbit Anti-Influenza A Virus H1N1 Hemagglutinin Monoclonal Antibody (Catalog # MAB113961). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

Influenza hemagglutinin (HA) is a homotrimeric glycoprotein found on the surface of influenza viruses. HA is responsible for binding influenza virus to sialic acid on the surface of target cells. HA is also responsible for the fusion of the viral envelope with the late endosomal protein when it is exposed to low pH. H1N1 is a subtype of Hemagglutinin in influenza A which also includes Neurominidase protein on its surface.

## References:

1. Russell, R.J. Kerry, P.S. Stevens, D.J. Steinhauer, D.A. Martin, S.R. Gamblin, S.H. Skehel, J.J. (November, 2008). "Structure of Influenza Hemagglutinin in Complex with an Inhibitor of Membrane Fusion". Proceedings of the National Academy of Sciences of the United States of America. **105(46)**:17736-41.
2. Edinger, T.O. Pohl, O. Sert, S. (February, 2014). "Entry of Influenza A. Virus: Host Factors and Antiviral Targets" (PDF). The Journal of General Virology. **95(Pt 2)**:263-277.
3. Horvath, P. Helenius, A. Yamauchi, Y. Banerjee, I. 12, July 2013. "High-Content Analysis of Sequential Events during the Early Phase of Influenza A Virus Infection". PLOS ONE. **8(7)**:e68450.
4. "Influenza Type A Viruses". Avian Influenza (Flu). CDC. 19, April 2017. Retrieved 27, August, 2018.