

## 12-8439: Anti-Influenza A, HA (Clone: Flu-5J8) Purified No Carrier Protein

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	Flu-5J8
<b>Application :</b>	ELISA
<b>Alternative Name :</b>	Flu
<b>Isotype :</b>	Human IgG1

### Description

Specificity: Flu-5J8 activity is directed against a conserved H1 epitope adjacent to the receptor binding site domain on the HA globular head. Furthermore, clone Flu-5J8 binds HA using receptor mimicry<sup>3</sup>. By inserting its HCDR3 into the HA receptor binding site (RBS), Flu-5J8 closely mimics the natural sialoglycan receptor and blocks viral-host interactions. Flu-5J8 contacts the Sb and Ca2 antigenic sites and binds to conserved residues in the RBS (130 loop, 190 helix, and 220 loop) as well as outside the RBS at the 140 loop. Furthermore, EM reconstructions show that Flu-5J8 occupies all three potential binding sites at the HA apex at and around the RBS. Mutations located between the receptor-binding pocket and the Ca2 antigenic site at residues 133A, 137, or 222 eliminate binding. In a lethal challenge in mice, Flu-5J8 protected all animals at the high and medium doses given and reduced lung virus titers relative to the control<sup>2</sup>.

Antigen Distribution: HA is on the viral surface.

Background: Hemagglutinin (HA) is a glycoprotein on the Influenza A (IAV) viral surface<sup>1</sup>. HA consists of two domains: an antigenically variable head and a more conserved stem. There are 18 HA subtypes. Neutralizing antibodies targeting the head domain are typically restricted to within subtype, while antibodies targeting the stem offer broader protection. In contrast, Flu-5J8 targets the HA globular head and offers broad protection<sup>2</sup>. Flu-5J8 inhibits all 1918 to 1977 H1N1 strains tested plus the pandemic 2009 strain but not the seasonal H1N1 strains from 1999 or 2007.

### Product Info

<b>Amount :</b>	250 µg / 1.0 mg Purity :>=90% monomer by analytical SEC and SDS-Page
<b>Purification :</b>	Preparation : Recombinant antibodies are manufactured in an animal free facility using only in vitro protein free cell culture techniques and are purified by a multi-step process including the use of protein A or G to assure extremely low levels of endotoxins, leachable protein A or aggregates. Concentration:>=1.0 mg/ml
<b>Content :</b>	Formulation: This recombinant monoclonal antibody is aseptically packaged and formulated in 0.01 M phosphate buffered saline (150 mM NaCl) PBS pH 7.2 - 7.4 with no carrier protein, potassium, calcium or preservatives added. Due to inherent biochemical properties of antibodies, certain products may be prone to precipitation over time. Precipitation may be removed by aseptic centrifugation and/or filtration.
<b>Storage condition :</b>	This antibody may be stored sterile as received at 2-8°C for up to one month. For longer term storage, aseptically aliquot in working volumes without diluting and store at <= -70°C. Avoid Repeated Freeze Thaw Cycles.

### Application Note

ELISA FC N