

12-8422: Anti-Influenza A, HA (Clone HA-1E10) Purified No Carrier Protein

Clonality :	Monoclonal
Clone Name :	HA-1E10
Application :	ELISA
Alternative Name :	Hemagglutinin, H1
Isotype :	Rabbit IgG

Description

Specificity: HA-1E10 activity is directed against the hemagglutinin head of Influenza A virus.

Antigen Distribution: Hemagglutinin is present on the influenza viral surface.

Background: Influenza A causes large numbers of infections and deaths annually, necessitating broad research into vaccines and therapeutics 1. Influenza A viruses are classified into subtypes based on the antigenicity of hemagglutinin (HA), the predominant glycoprotein found on the viral surface. There are 18 HA subtypes, which are subdivided into two groups: Group 1 (H1, H2, H5, H6, H8, H9, H11, H12, H13, H16, H17 and H18) and Group 2 (H3, H4, H7, H10, H14 and H15). HA has a receptor binding function that promotes viral entry by engaging sialylated glycan receptors on host cells and enabling host membrane fusion. HA is constantly evolving to escape herd immunity and this can result in pandemics. HA is a homotrimer consisting of two domains: a globular, antigenically variable head and a more conserved, membrane-proximal stem 1,2. Neutralizing antibodies targeting the head domain are typically restricted to within subtype, while antibodies targeting the stem can act more broadly across subtypes 2. Although most anti-HA antibodies are strain-specific, antibodies with broad neutralizing activity against multiple strains or subtypes have been found 1. These broadly neutralizing antibodies are of research interest because they may enable the development of a universal influenza vaccine and/or monoclonal antibody therapy 1,3. Characterization of HA-peptide antibody led to the identification of the commonly used HA-tag, a linear epitope of nine amino acids used for protein purification and labeling 1. This epitope is not clinically useful because it is inaccessible in the native HA conformation.

Product Info

Amount :	250 µg / 1.0 mg Purity :>90% monomer by analytical SEC and SDS-Page
Purification :	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
Content :	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.
Storage condition :	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