

## 12-8542: Anti-Influenza B Neuraminidase (Clone B19)

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	B19
<b>Application :</b>	ELISA
<b>Isotype :</b>	Mouse IgG2a
<b>Immunogen Information :</b>	Influenza B HK/73.

### Description

#### Specificity

Mouse Monoclonal Antibody specific to Influenza B Neuraminidase

#### Background

##### Mechanism of Action: Influenza Neuraminidase

Neuraminidases are critical surface enzymes responsible for cleaving sialic acid groups from glycoproteins. In the context of the Influenza B virus, viral neuraminidase (NA) plays a pivotal role in the lifecycle of the pathogen. Structurally, Influenza neuraminidase is composed of four identical subunits arranged in a square tetramer, anchored to the virus surface by a long protein stalk. The enzyme's active sites are located in deep depressions on the upper surface, where they bind to polysaccharide chains and clip off terminal sugars.

##### Neuraminidase vs. Hemagglutinin in Viral Infection

-Neuraminidase (NA) and Hemagglutinin (HA) are the two major membrane glycoproteins found on the surface of the influenza virus. They function in concert but with opposing roles:

- Hemagglutinin (HA): Initiates infection by binding to sialic acid-containing receptors on the surface of host cells.
- Neuraminidase (NA): Facilitates viral release. It acts as a receptor-destroying enzyme by cleaving the HA-sialic acid bond between newly formed virions and host cell receptors during budding.

### Product Info

<b>Amount :</b>	500 µg
<b>Purification :</b>	Purified by Protein G affinity chromatography
<b>Content :</b>	Concentration: Lot Specific Formulation: PBS, pH 7.4.
<b>Storage condition :</b>	This antibody is stable for at least one (1) year at -20°C to -70°C. Store product in appropriate aliquots to avoid multiple freeze-thaw cycles.

### Application Note

These antibodies may be used in immunoassays to detect and quantitate Influenza B neuraminidase and in neuraminidase inhibition assays.