

Description

The Influenza HA H3 Peptide (307-319, PKYVKQNTLKLAT) is a peptide corresponding to the Influenza A virus subtype H3N2 HA (hemagglutinin), amino acids 307-319. The peptide is widely used to stimulate human H3N2 Influenza -specific CD4⁺ T cells.

Background

Influenza A virus (IAV) causes the flu in birds and mammals, including humans. Influenza A viruses are negative-sense, single-stranded, segmented RNA viruses whose subtypes are labeled according to an H number (for the type of hemagglutinin) and an N number (for the type of neuraminidase). There are 18 different known H antigens (H1 to H18) and 11 different known N antigens (N1 to N11), classified based on their reaction to antisera. Hemagglutinin binds to sialic acid on the surface of the target cells and is critical for infection. Neuraminidase is an enzyme that cleaves sialic acid and allows newly formed viruses to be released from the infected cells. The alpha/beta T cell receptor (TCR) HA1.7 specifically recognizes the influenza A virus HA peptide (PKYVKQNTLKLAT) presented by the allo-major histocompatibility complex (MHC) class II molecule. Influenza is responsible for more than 36,000 deaths/year in the USA only, and costs about 10 billion dollars. It is thus crucial to continue to investigate and develop tools to minimize the impact of this virus on human health.

Sequence

PKYVKQNTLKLAT

Species

Influenza

Supplied As

Liquid, 100 µl

Formulation

1 mM peptide in DMSO

Stability

At least one year at -80°C.

Storage

Upon first thaw, aliquot and store at -80°C. Avoid repeated freeze-thaw cycles.

Application

Stimulation of Influenza-specific CD4⁺ T cells

Related Products

<i>Products</i>	<i>Catalog #</i>	<i>Size</i>
Influenza HA H1 peptide (Hawaii H1N1)	82312	100 µl
Influenza A Virus HA TCR Lentivirus (Clone HA1.7)	78988	100 µl/500 µl x 2

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