Product Data Sheet

Chemical Properties

Product Name: Influenza Hemagglutinin (HA) Peptide

Cas No.: 92000-76-5

M.Wt: 1102.15

Formula: C53H67N9O17

Synonyms: H-Tyr-Pro-Tyr-Asp-Val-Pro-Asp-Tyr-Ala-OH

Chemical Name: Influenza Hemagglutinin (HA) Peptide

Canonical SMILES: CC(C)(C(=O)N1CCCC1C(=O)NC(CC(=O)O)C(=O)NC(CC2=CC=C(C=C2)O)C(=O)NC(C)(C=O)O)NC(=O)C(CC(=O)C(=O)NC(CC3=CC=C(C=C3)O)NC(=O)C4CCCN4C(=O)C(CC5=CC=C(C=C5)O)N

Solubility: ≥55.1075 mg/mL in DMSO, ≥100.4 mg/mL in EtOH, ≥46.2 mg/mL in H2O

Storage: Desiccate at -20°C

General tips: For obtaining a higher solubility, please warm the tube at 37°C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shopping Condition: Evaluation sample solution: ship with blue ice
All other available size: ship with RT, or blue ice upon request

Biological Activity

Targets: Tag Peptides

Pathways:

Description:
HA tag, Complexes containing plasmid DNA, transferrin-polylysine conjugates, and polylysine-conjugated peptides derived from the N-terminal sequence of the influenza virus
hemagglutinin subunit HA-2 have been used for the transfer of luciferase or -galactosidase marker genes to K562 cells, HeLa cells, and BNL CL.2 hepatocytes. The presence of these influenza peptide conjugates in the DNA complexes renders the complexes active in membrane disruption in a liposome leakage assay and results in a substantial augmentation of the transferrin-polylysine-mediated gene transfer. Fusogenic peptides derived from the N-terminal sequence of the influenza virus hemagglutinin subunit HA-2 is part of the DNA complexes and the resulting augmentation of gene transfer to cultured cells1.

In the influenza virus, the hemagglutinin (HA) protein mediates both binding of the virus to the cell surface and the subsequent fusion of viral and cellular membranes. HA is composed of a receptor-binding subunit, denoted HA1, and a fusogenic subunit, denoted HA2. The native HA1yHA2 complex, as found on the surface of the native virus, is fusioninactive. For influenza virus, membrane fusion is regulated by the conformational state of the hemagglutinin (HA) protein, which switches from a native (nonfusogenic) structure to a fusion-active (fusogenic) conformation when exposed to the acidic environment of the cellular endosome. The native structure of HA is trapped in a metastable state and that the fusogenic conformation is released by destabilization of native structure2.

Reference:

Product Citations


Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most ApexBio products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will
maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.