10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

SARS-CoV-2 Spike Peptide (DFCGKGYHLMSFPQS)

Coronavirus Peptide
Catalog # VGP1105

Specification

SARS-CoV-2 Spike Peptide (DFCGKGYHLMSFPQS) - Product Information

Sequence	**DFCGKGYHLMSFPQS**
Purity	
>90% (HPLC-MS)	
Application	**Cellular immune response, T-cell expansion, Antigen specific T-cell stimulation, Immune monitoring, T-cell assays**
Primary Accession	P0DTC2
Other Accession	AAP41037.1

SARS-CoV-2 Spike Peptide (DFCGKGYHLMSFPQS) - Additional Information

Gene ID	**4374056**

Other Names
SARS-CoV-2 Spike Glycoprotein , E2 , Peplomer

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

SARS-CoV-2 Spike Peptide (DFCGKGYHLMSFPQS) - Images

SARS-CoV-2 Spike Peptide (DFCGKGYHLMSFPQS) - Background

SARS-CoV-2 is part of the Coronaviridae family, whose members are named after their crown-like appearance under the electron microscope caused by the surface glycoproteins that decorate the virus. Coronaviruses have a large (30+ kb) single-stranded positivesense RNA genome encoding for several open reading frames. One frame encodes the spike protein (S protein), a class I fusion protein that mediates attachment of the virus to cell surface receptors followed by uptake into endosomes (for most coronaviruses). Proteolytic cleavage of the S protein and fusion of viral and endosomal membranes trigger release of viral RNA into the cytosol. We know now from studies on SARS-CoV-1 and the related MERS-CoV vaccines that the S protein on the surface of the virus is an ideal target for a vaccine. In SARS-CoV-1 and SARS-CoV-2, this protein interacts with the receptor ACE2, and antibodies targeting the spike can interfere with this binding, thereby neutralizing the virus. The structure of the S protein of SARS-CoV-2 was solved in record time at high resolution, contributing to our understanding of this vaccine target. More than 90 vaccines are being developed against SARS-CoV-2 by research teams in companies and universities across the world.