

# SARS-CoV-2 (Spike Protein) Delta/B.1.617.2 WT Reference Peptide Pool

**SARS-CoV-2 (spike protein) Delta/B.1.617.2 variant wild-type  
reference peptide pool for immune cell activation**

Catalog #100-1381

~25 µg (15 nmol)/peptide



Scientists Helping Scientists™ | [WWW.STEMCELL.COM](http://WWW.STEMCELL.COM)

TOLL FREE PHONE 1 800 667 0322 • PHONE +1 604 877 0713

[INFO@STEMCELL.COM](mailto:INFO@STEMCELL.COM) • [TECHSUPPORT@STEMCELL.COM](mailto:TECHSUPPORT@STEMCELL.COM)

FOR GLOBAL CONTACT DETAILS VISIT OUR WEBSITE

## Product Description

SARS-CoV-2 (Spike Protein) Delta/B.1.617.2 WT Reference Peptide Pool is a lyophilized mixture of 27 peptides from the spike glycoprotein of SARS-CoV-2 wild-type. The pool represents the wild-type peptides of the mutations in the spike protein of SARS-CoV-2 Delta variant (B.1.617.2) and is recommended as a reference. The virus attaches to the cell membrane of the host through the interaction between spike protein and angiotensin-converting enzyme 2 (ACE2) receptor, and the spike protein plays a critical role in viral entry (Hoffmann et al.; Walls et al.). One unit of this product (i.e. ~25 µg/peptide) is sufficient for stimulating  $2.5 \times 10^8$  cells.

### APPLICATIONS

- Antigen-specific T cell stimulation
- Cellular immune response
- Immune monitoring
- T cell assays
- T cell expansion

## Product Information

Number of Peptides:	27
Source:	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2), wild-type
Accession Number:	P0DTC2
Protein Name:	S glycoprotein; Spike glycoprotein; Surface glycoprotein
Gene Name:	S
Purity:	Average 70%
Formulation:	Lyophilized as trifluoroacetate salts

## Preparation and Storage

Storage:	Store at -20°C.
Stability:	Stable as supplied until expiry date (EXP) on label.
Preparation:	Warm to room temperature (15 - 25°C) before reconstitution. Add pure dimethyl sulfoxide (DMSO; ~40 µL) and dilute with water to the desired concentration. Final concentration of DMSO must be below 1% (v/v) to avoid toxicity in the biological system. If not used immediately, aliquot and store at -20°C. Protect from light. Avoid repeated freeze-thaw cycles.

## Peptide Sequences

NO.	SEQUENCE	LENGTH	NO.	SEQUENCE	LENGTH
1	LVLLPLVSSQC VNLT	15	15	STPCNGVEGFNCYFP	15
2	PLVSSQC VNLTTRTQ	15	16	GTNTSNQVAVLYQDV	15
3	SQC VNLTTRTQLPPA	15	17	SNQVAVLYQDVNCTE	15
4	NLTTRTQLPPAYTNS	15	18	AVLYQDVNCTEVPVA	15
5	YHKNNKSWMESEFRV	15	19	QDVNCTEVPVAIHAD	15
6	NKSWMESEFRVYSSA	15	20	GICASYQTQTNSPRR	15
7	MESEFRVYSSANNCT	15	21	SYQTQTNSPRRARSV	15
8	FRVYSSANNCTFEYV	15	22	QTNSPRRARSVASQS	15
9	LDSKVGGNYNYLYRL	15	23	PRRARSVASQSIIAY	15
10	VGGNYNYLYRLFRKS	15	24	SLSSTASALGKLQDV	15
11	YNYLYRLFRKSNLKP	15	25	TASALGKLQDVNQN	15
12	ERDISTEIQAGSTP	15	26	LGKLQDVVNQNAQAL	15
13	STEIQAGSTPCNGV	15	27	QDVVNQNAQALNTLV	15
14	YQAGSTPCNGVEGFN	15			

## Related Products

For a complete list of peptide pools, as well as related products available from STEMCELL Technologies, visit [www.stemcell.com](http://www.stemcell.com), or contact us at [techsupport@stemcell.com](mailto:techsupport@stemcell.com).

## References

Hoffmann M et al. (2020) SARS-CoV-2 cell entry depends on ACE2 and TMPRSS2 and is blocked by a clinically proven protease inhibitor. Cell 181(2): 271–80.

Walls AC et al. (2020) Structure, function, and antigenicity of the SARS-CoV-2 spike glycoprotein. Cell 181(2): 281–92.

PRODUCTS ARE FOR RESEARCH USE ONLY AND NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES UNLESS OTHERWISE STATED.

Copyright © 2023 by STEMCELL Technologies Inc. All rights reserved including graphics and images. STEMCELL Technologies & Design, STEMCELL Shield Design, and Scientists Helping Scientists are trademarks of STEMCELL Technologies Canada Inc. All other trademarks are the property of their respective holders. While STEMCELL has made all reasonable efforts to ensure that the information provided by STEMCELL and its suppliers is correct, it makes no warranties or representations as to the accuracy or completeness of such information.