

# SARS-CoV-2 (NS7a) Peptide Pool

## SARS-CoV-2 (NS7a) peptide pool for immune cell activation

Catalog #100-0661

~25 µg/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

The SARS-CoV-2 (NS7a) Peptide Pool is a lyophilized mixture of 28 peptides from non-structural protein 7a (NS7a) of SARS-CoV-2. SARS-CoV NS7a is known to disrupt antiviral effects and directly interact with human lymphocyte function-associated antigen 1 (LFA-1) on the cell surface (Bharath et al.; Hänel & Willbold; Taylor et al.). Sequence similarities between the two proteins suggests SARS-CoV-2 NS7a plays a similar role. The pool consists of 15-mer peptides with 11-amino-acid overlaps that cover amino acids 1 - 121 on NS7a.

## Product Information

Number of Peptides:	28
Source:	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2)
Protein ID:	P0DTC7 (Swiss-Prot)
Protein Name:	Non-structural protein 7a; NS7a
Protein Sequence:	MKIIILFLALITLATCELYHYQECVGRGTTVLLKEPCSSGYEGNSPFHPLADNKFALTCFSTQFAFACPDGKHHVYQLRA RSVSPKLFIRQEEVQELYSPIFLIVAAIVFITLCFTLKRKTE
Gene Name:	NS7a
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. After thawing aliquots, do not re-freeze.

## 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

- Bharath BR et al. (2020) In silico screening of known small molecules to bind ACE2 specific RBD on spike glycoprotein of SARS-CoV-2 for repurposing against COVID-19. *F1000Res* 9: 663.
- Hänel K & Willbold D. (2007) SARS-CoV accessory protein 7a directly interacts with human LFA-1. *Biol Chem* 388(12): 1325–32.
- Taylor JK et al. (2015) Severe acute respiratory syndrome coronavirus ORF7a inhibits bone marrow stromal antigen 2 virion tethering through a novel mechanism of glycosylation interference. *J Virol* 89(23): 11820–33.

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

Copyright © 2021 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.