

SARS-CoV-2 (Nucleocapsid Protein) Peptide Pool

SARS-CoV-2 (nucleocapsid protein) peptide pool for immune cell activation

Catalog #100-0647

1 Unit

~25 µg (15 nmol)/peptide

Product Description

SARS-CoV-2 (Nucleocapsid Protein) Peptide Pool is a lyophilized mixture of 102 peptides from the nucleocapsid protein of SARS-CoV-2. Nucleocapsid protein is one of four structural proteins that interacts with RNA to form the nucleocapsid. It also interacts with membrane protein (protein M) in the packaging of positive-strand viral genome RNA during virion assembly (Ahmed et al.; Chang et al.; Kannan et al.; Li et al.; Zhou et al.). The pool consists of 15-mer peptides with 11-amino-acid overlaps that cover amino acids 1 - 419 on SARS-CoV-2 nucleocapsid protein. One unit of this product (i.e. ~25 µg/peptide) is sufficient for stimulating 2.5×10^8 cells.

Product Information

Amino Acid Sequence:	MSDNGPQNQRNAPRITFGGSPDSTGSNQNNGERSGARSKQRRPQGLPNNTASWFTALTQHGKEDLKFP RGGVPIINTNSSPDDQIGYYRRATRRIRGGDGKMKDLSPRWYFYLLGTGPEAGLPYGANKDGIWVATEGALN TPKDHIGTRNPANNAIIVLQLPQGTTLPKGFYAEGRGGSQASSRSSRSRNSSRNSTPGSSRGTS PARMAG NNGDAALALLLLDRLNQLKESKMSGKGGQQGQQTVTKKSAAEASKKPRQKRTATKAYNVTQAFGRRGPEQ TQGNFGDQELIRQGTDYKHWPQIAQFAPSASAFFGMSRIGMEVTPSGTWLTYTGAIKLDDKDPNFKDQVIL LNKHIDAYKTFPPEPKKDKKKKADETQALPQRQKKQQTVTLTPAADLDDFSKQLQQSMSSADSTQA
Product Formulation:	Lyophilized as trifluoroacetate salts
Source:	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2)
Number of Peptides:	102
Protein ID:	P0DTC9
Protein Name:	N Protein, Nucleocapsid protein
Gene Name:	N
Purity:	Average 70%

Preparation and Storage

Stability and Storage:	Store at -20°C. 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.

Related Products

For a complete list of cytokines or peptide pools, as well as related products available from STEMCELL Technologies, visit www.stemcell.com/cytokines or contact us at techsupport@stemcell.com.

References

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- Kannan S et al. (2020) COVID-19 (Novel Coronavirus 2019) - recent trends. *Eur Rev Med Pharmacol Sci* 24(4): 2006-11.
- Li H et al. (2020) Coronavirus disease 2019 (COVID-19): current status and future perspectives. *Int J Antimicrob Agents* 55(5): 105951.
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