

HIV-1 (B Gag) Peptide Pool

Human immunodeficiency virus 1 (B Gag) peptide pool for immune cell activation

Catalog #100-1385

~25 µg (15 nmol)/peptide



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Product Description

HIV-1 (B Gag) Peptide Pool is a lyophilized mixture of 123 peptides from the gag polyprotein of human immunodeficiency virus 1 (HIV-1). The pool consists of 15-mer peptides with 11-amino-acid overlaps that cover amino acids 1 - 500 on gag polyprotein. The HIV-1 gag polyprotein is a key mediator of viral particle assembly (Campbell & Rein; Dong et al.) and together with the endosomal sorting complexes required for transport (ESCRT) results in budding during virion release (Carlson et al.). One unit of this product (i.e. ~25 µg/peptide) is sufficient for stimulating 2.5×10^8 cells.

APPLICATIONS

- T cell immunity

Product Information

Number of Peptides: 123

Source: Human immunodeficiency virus type 1 group M subtype B (isolate HXB2)

Accession Number: P04591

Protein Name: Gag polyprotein

Protein Sequence: MGARASVLSGGELDRWEKIRLRPGGKKKYKLKHIVWASRELERFAVNPGLLETSEGCRQILGQLQPSLQTGSEEL
RSLYNTVATLYCVHQRIEIKDTKEALDKIEEEQNKSKKKAQQAADTGHSNQVSQNYPIVQNIQGQMVHQAISPR
LNAWVKVVEEKAFSPEVPMFSALSEGATPQDLNTMLNTVGGHQAAMQMLKETINEEAAEWDRVHPVHAGPIAPG
QMREPRGSDIAGTTSTLQEQIGWMTNPNPIPVGIEYKRWIILGLNKIVRMYSPSILDIRQGPKEPFRDYVDRFYKTLR
AEQASQEVKNWMTETLLVQNANPDCKTILKALGPAATLEEMMTACQGVGGPGHKARVLAEMSQVTNSATIMM
QRGNFRNQRKIVKCFNCGKEGHTARNCRAPRKKGCWKCGKEGHQMKDCTERQANFLGKIWPSYKGRPGNFLQ
SRPEPTAPPEESFRSGVETTPPQKQEPIDKELYPLTSLRSLFGNDPSSQ

Gene Name: Gag

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.

Related Products

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

References

Campbell S & Rein A. (1999) In vitro assembly properties of human immunodeficiency virus type 1 Gag protein lacking the p6 domain. *J Virol* 73(3): 2270–9.

Carlson LA et al. (2008) Three-dimensional analysis of budding sites and released virus suggests a revised model for HIV-1 morphogenesis. *Cell Host Microbe* 4(6): 592–9.

Dong X et al. (2005) AP-3 directs the intracellular trafficking of HIV-1 Gag and plays a key role in particle assembly. *Cell* 120(5): 663–74.

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