HHV1 (gD) Peptide Pool

Human herpesvirus 1 (envelope glycoprotein D) peptide pool for immune cell activation

Catalog #100-1406 ~25 µg (15 nmol)/peptide

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Product Description

HHV1 (gD) Peptide Pool is a lyophilized mixture of 96 peptides from envelope glycoprotein D (gD) of human herpesvirus 1 (HHV1; strain Patton). The pool consists of 15-mer peptides with 11-amino-acid overlaps that cover amino acids 1 - 394 on gD. gD is required at the first stage of virus-induced membrane fusion (Subramanian & Geraghty), which likely occurs via binding to the receptors such as nectin-1 (Giovine et al.) and herpesvirus entry mediator HveA (Connolly et al.) on the host cell surface. One unit of this product (i.e. 25 µg/peptide) is sufficient for stimulating 2.5 x 10^8 cells.

Product Information

Number of Peptides:	96
Source:	Human herpesvirus 1 (strain Patton) (also known as human herpes simplex virus 1 [HSV-1])
Accession Number:	P57083
Protein Name:	Envelope glycoprotein D (gD)
Protein Sequence:	MGGTAARLGAVILFVVIVGLHGVRGKYALADASLKMADPNRFRGKDLPVLDQLTDPPGVRRVYHIQAGLPDPFQP PSLPITVYYAVLERACRSVLLNAPSEAPQIVRGASEDVRKQPYNLTIAWFRMGGNCAIPITVMEYTECSYNKSLGACP IRTQPRWNYYDSFSAVSEDNLGFLMHAPAFETAGTYLRLVKINDWTEITQFILEHRAKGSCKYALPLRIPPSACLSPQ AYQQGVTVDSIGMLPRFIPENQRTVAVYSLKIAGWHGPKAPYTSTLLPPELSETPNATQPELAPEDPEDSALLEDPV GTVAPQIPPNWHIPSIQDAATPYHPPATPNNMGLIAGAVGGSLLAALVICGIVYWMHRRTRKAPKRIRLPHIREDDQ PSSHQPLFY
Gene Name:	gD
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

Connolly SA et al. (2002) Structure-based analysis of the herpes simplex virus glycoprotein D binding site present on herpesvirus entry mediator HveA (HVEM). J Virol 76(21): 10894–904.

Giovine PD et al. (2011) Structure of herpes simplex virus glycoprotein D bound to the human receptor nectin-1. PLoS Pathog 7(9): e1002277.

Subramanian RP & Geraghty RJ. (2007) Herpes simplex virus type 1 mediates fusion through a hemifusion intermediate by sequential activity of glycoproteins D, H, L, and B. Proc Natl Acad Sci USA 104(8): 2903–8.