VZV (IE63) Peptide Pool

Varicella-zoster virus (immediate-early protein 63) peptide pool for immune cell activation

Catalog #100-1409 ~25 µg (15 nmol)/peptide

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Scientists Helping Scientists™ | WWW.STEMCELL.COM
TOLL FREE PHONE 1 800 667 0322 • PHONE +1 604 877 0713
INFO@STEMCELL.COM • TECHSUPPORT@STEMCELL.COM
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Product Description

VZV (IE63) Peptide Pool is a lyophilized mixture of 67 peptides from immediate-early protein 63 (IE63) of varicella-zoster virus (VZV; strain Oka vaccine). The pool consists of 15-mer peptides with 11-amino-acid overlaps that cover amino acids 1 - 278 on IE63. IE63 is expressed during VZV latency and reactivation (Lungu et al.) and demonstrates repressive activity in both the cytoplasm and nucleus of infected cells (Bontems et al.). Host interferon alpha (IFN-α) activity is inhibited by VZV IE63, which likely contributes to VZV pathogenesis (Ambagala & Cohen). One unit of this product (i.e. 25 µg/peptide) is sufficient for stimulating 2.5 x 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:	67
Source:	Varicella-zoster virus (strain Oka vaccine) (also known as human herpesvirus 3 [HHV-3])
Accession Number:	Q77NN7
Protein Name:	Immediate-early protein 63 (IE63); Transcriptional regulator ICP22 homolog
Protein Sequence:	MFCTSPATRGDSSESKPGASVDVNGKMEYGSAPGPLNGRDTSRGPGAFCTPGWEIHPARLVEDINRVFLCIAQSS GRVTRDSRRLRRICLDFYLMGRTRQRPTLACWEELLQLQPTQTQCLRATLMEVSHRPPRGEDGFIEAPNVPLHRSA LECDVSDDGGEDDSDDDGSTPSDVIEFRDSDAESSDGEDFIVEEESEESTDSCEPDGVPGDCYRDGDGCNTPSPK RPQRAIERYAGAETAEYTAAKALTALGEGGVDWKRRRHEAPRRHDIPPPHGV
Gene Name:	ORF63
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

Ambagala AP & Cohen JI. (2007) Varicella-Zoster virus IE63, a major viral latency protein, is required to inhibit the alpha interferon-induced antiviral response. J Virol 81(15): 7844–51.

Bontems S et al. (2002) Phosphorylation of varicella-zoster virus IE63 protein by casein kinases influences its cellular localization and gene regulation activity. J Biol Chem 277(23): 21050–60.

Lungu O et al. (1998) Aberrant intracellular localization of Varicella-Zoster virus regulatory proteins during latency. Proc Natl Acad Sci USA 95(12):7080–5.