

JCV (LT) Peptide Pool

JC polyomavirus (large T) peptide pool for immune cell activation

Catalog #100-1399

~25 µg (15 nmol)/peptide



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Product Description

JCV (LT) Peptide Pool is a lyophilized mixture of 170 peptides from large T (LT) antigen of JC polyomavirus (JCV). The pool consists of 15-mer peptides with 11-amino-acid overlaps that cover amino acids 1 - 688 on LT antigen. LT antigen is detectable during JCV latency (Rossi et al.) as well as JVC-associated pathologies such as progressive multifocal leukoencephalopathy (PML) in immunocompromised patients (Delbue et al.). In PML, LT antigen has been associated with activating the promoter of survivin, an anti-apoptotic protein (Del Valle et al.). One unit of this product (i.e. ~25 µg/peptide) is sufficient for stimulating 2.5×10^8 cells.

APPLICATIONS

- Antigen-specific T cell stimulation
- T cell assays

Product Information

Number of Peptides:	170
Source:	JC polyomavirus (also known as JCPyV)
Accession Number:	P03072
Protein Name:	Large T (LT) antigen
Protein Sequence:	MDKVLNREESMELMDLLGLDRSAWGNIPVMRKAYLKCKELHPDKGGDEDKMKRMNPLYKKMEQGVKVAH QPDFGTWNSSEVPTYGTDEWESWWNTFNEKWDEDLFCHEEMFASDDENTGSQHSTPPKKKKKVEDPKDFPVDL HAFLSQAVFSNRTVASFAVYTTKEKAQILYKKLMEKYSVTFISRHGFGGHNILFFLTPHRHRVSAINNYCQKLCFTSF LICKGVNKEYLFYSALCRQPYAVVEESIQGGLKEHDFNPEEPEETKQVSWKLVTQYALETKCEDVFLLMGMYLDFQ ENPQQCKKCEKQDQPNHFNHHEKHYYNAQIFADSKNQKSICQQAQVDTVAQKQVDSIHMTREEMLVERFNFLD KMDLIFGAHGNVLEQYMAGVAWIHCLLPQMDTVIYDFLKCIVLNIPKKRYWLFKGPIDSGKTTLAAALLDLGCGK SLNVNMPLERLNLFELGVGIDQFMVVFEDVKGTGAESRDLPSGHGISNLDCLRDYLDGSVKVNLERKHQNKRTQVF PPGIVTMNEYSVPRTLQARFVRQIDFRPKAYLRKSLSCSEYLLKRIQLSGMTLLLLLIWFRPVADFAAAIHERIVQWK ERLDLEISMYTFSTMKANVGMGRPILDFPREEDSEAEDSGHGSSTESQSQCFQVSEAS GADTQENCTFHICKGFQCFKKPKTPPPK
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

- Del Valle L et al. (2020) JCPyV T-antigen activation of the anti-apoptotic survivin promoter—its role in the development of progressive multifocal leukoencephalopathy. *Viruses* 12(11): 1253.
- Delbue S et al. (2008) Presence and expression of JCV early gene large T antigen in the brains of immunocompromised and immunocompetent individuals. *J Med Virol* 80(12): 2147–52.
- Rossi A et al. (2007) Presence, quantitation and characterization of JC virus in the urine of Italian immunocompetent subjects. *J Med Virol* 79(4): 408–12.

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