



Recombinant Viral MIP MIP-II (a.a. 24-94) (DAG2627)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	Recombinant Viral MIP-II was expressed in E. coli. Leu24-Arg94 (Accession # Q98157)
Species	Viral MIP
Purity	> 97%, by SDS-PAGE under reducing conditions and visualized by silver stain.
Conjugate	Unconjugated
Format	Lyophilized from a 0.2 µm filtered solution in Acetonitrile and TFA with BSA as a carrier protein.
Preservative	None
Storage	2-8°C short term, -20°C long term

BACKGROUND

Introduction

Human herpesvirus-8 (HHV-8)/Kaposi's sarcoma-associated herpesvirus (KSHV) is a γ herpesvirus with homology to herpesvirus Saimiri and Epstein-Barr virus. HHV-8 is etiologically linked to Kaposi's sarcoma and a B-cell lymphoma known as primary effusion lymphoma. HHV-8 has been shown to encode a variety of immunomodulatory proteins which were apparently pirated from cellular genes by the virus. Three chemokine-like proteins, vMIP-I, vMIP-II and vMIP-III have been found to be encoded within the HHV-8 genome. Viral MIP-II cDNA encodes a 94 amino acid (aa) residue precursor protein with a 23 aa residue signal peptide that is cleaved to yield a 71 aa residue mature protein. Among human chemokines, vMIP-II is most closely related to MIP-1α, sharing approximately 41% amino acid sequence identity. At the amino acid sequence level, vMIP-I and vMIP-II also share 48% identity. vMIP-I and vMIP-II are more closely related to one another phylogenetically than to other human chemokines, suggesting that they may have arisen by gene duplication within the virus rather than by two independent gene acquisitions. vMIP-II binds to the CCR-3 chemokine receptor through which

eotaxin and other β chemokines activate eosinophils. vMIP-II has been shown to activate and chemoattract human eosinophils. Both vMIP-I and vMIP-II have been shown to partially block HIV infection of peripheral blood mononuclear cells. vMIP-I and vMIP-II have also been found to be highly angiogenic in the chorioallantoic assay, suggesting that they may be partially responsible for the marked vascularity seen in KSHV-associated tumors.

Keywords

Kaposi's sarcoma-associated herpesvirus; KSHV; Human herpesvirus 8; HHV-8; Rhadinovirus; Gammaherpesvirinae; Viral MIP-II; MIP-II; MIP-II1 α ; vMIP-II; Human herpesvirus 8 MIP-II; HHV-8 MIP-II protein; Human herpesvirus-8 MIP-II protein
