

# Recombinant Viral Macrophage Inflammatory Protein-2

## **Information**

Gene ID	4961514	
Accession #	Q98157	
Alternate Names	Viral Macrophage Inflammatory Protein II, vMIP-1B, MIP-II, vMIP-2	
Source	Escherichia coli.	
M.Wt	Approximately 8.0 kDa, a single, non-glycosylated polypeptide chain containing 70 amino acids.	
AA Sequence	LGASWHRPDK CCLGYQKRPL PQVLLSSWYP TSQLCSKPGV IFLTKRGRQV CADKSKDWVK KLMQQLPVTA	
Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.	
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles - 12 months from date of receipt, -20 to -70 °C as supplied - 1 month, 2 to 8 °C under sterile conditions after reconstitution - 3 months, -20 to -70 °C under sterile conditions after reconstitution	
Formulation	Lyophilized from a 0.2 $\mu$ m filtered concentrated solution in 20 mM PB, pH 7.4, 150mM NaCl.	
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at $\leq$ -20 °C. Further dilutions should be made in appropriate buffered solutions.	
Biological Activity	Fully biologically active when compared to standard. The specific activity is determined by the inhibitory effect on monocyte migration response to human MIP-1 alpha using a concentration range of 1.0µg-10.0µg/ml of viral MIP-2 will inhibit 25ng/ml of human MIP-1 alpha.	
Shipping Condition	Gel pack.	
Handling	Centrifuge the vial prior to opening.	
Usage	For Research Use Only! Not to be used in humans.	
Components and S	torage	

#### Components and Storage -

Components	10µg	100µg	500µg
Recombinant Viral Macrophage Inflammatory Protein-2	10µg	100µg	500µg

Use a manual defrost freezer and avoid repeated freeze-thaw cycles

- 12 months from date of receipt, -20 to -70 °C as supplied
- 1 month, 2 to 8 °C under sterile conditions after reconstitution
- 3 months, -20 to -70 °C under sterile conditions after reconstitution

Quality Control	19 million	<b>39</b>
Purity	> 97 % by SDS-PAGE and HPLC analyses.	Person income of
Endotoxin	Less than 1 EU/ $_{\mu}$ g of rViMIP-2 as determined	by LAL method.

## Description

Viral MIP-2 is one of the three chemokine-like proteins expressed by the human herpesvirus 8 (Kaposi's sarcoma-associated herpesvirus, KSHV) and the other is ViMIP-1 and ViMIP-3. It shares 41 % and 48 % with human MIP-1 a and ViMIP-1, respectively. ViMIP-2 has been shown to have antagonist activity towards a wide range of chemokine receptors and has functions of blocking infection by several different human immunodeficiency virus type 1 (HIV-1) strains. It may form part of the response to host defenses contributing to virus-induced neoplasia and may have relevance to KSHV and HIV-I interactions. Additionally, ViMIP-2 has been shown to activate and chemoattract human eosinphils.

### Reference

- 1. Liwang AC, Wang ZX, Sun Y, et al. 1999. Protein Sci, 8: 2270-80
- 2. Morris KV, Higgins J, Shen X, et al. 2003. Virus Res, 94: 103-12
- 3. Luttichau HR. 2008. Virol J, 5: 50
- 4. Shao W, Fernandez E, Sachpatzidis A, et al. 2001. Eur J Biochem, 268: 2948-59.

