Recombinant Viral MCV-type II Chemokine-like Protein
Catalog Number: 697-M3/CF

DESCRIPTION

Source  E. coli-derived
Leu25-Leu104
Accession # AAB72041

N-terminal Sequence Analysis
Leu25

Predicted Molecular Mass
9.1 kDa

SPECIFICATIONS

Activity
Measured by its ability to block I-309-induced chemotaxis of BaF3 mouse pro-B cells transfected with human CCR8.
The ED_{50} for this effect is 15-75 ng/mL in the presence of 20 ng/mL rh-I-309.

Endotoxin Level
<0.10 EU per 1 μg of the protein by the LAL method.

Purity
>97%, by SDS-PAGE under reducing conditions and visualized by silver stain.

Formulation
Lyophilized from a 0.2 μm filtered solution in Acetonitrile and TFA. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution
Reconstitute at 100 μg/mL in sterile PBS.

Shipping
The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

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.

BACKGROUND

Molluscum contagiosum virus (MCV) is a human cutaneous poxvirus which causes benign proliferative lesions of the skin in normal and immunocompromised individuals. Based on endonuclease cleavage patterns of viral DNA, MCV isolates can be classified into two different types, MCV type I (MCVI) and MCV type II (MCVII). Like other DNA viruses such as poxviruses and herpesviruses, MCV has been shown to encode homologs of cellular immunomodulatory proteins. These viral proteins enable the virus to evade the host immune system and enhance the ability of the virus to propagate and survive.

MC148R2 is a CC chemokine-like protein encoded by a MCV type II gene. MC148R2 cDNA encodes a putative 104 amino acid (aa) protein containing a 24 aa signal peptide that is cleaved to produce an 80 aa mature protein. The mature protein shares 89% homology to the MCV type I chemokine-like protein, MC148R1. Compared to MIP-β, MC148R2 retains the 4 conserved cysteine residues but has a 5 aa residue deletion at the amino-terminus region which is important for receptor activation. The MCV type I and type 2 proteins do not exhibit chemotactic properties, however these proteins have been shown in vitro to inhibit the monocyte chemotaxis induced by human MIP-1α as well as the binding of radiolabeled I-309 to hCCR8 transfected cells.

References: