

DESCRIPTION

Source *E. coli*-derived
Thr23-Gly117
Accession # AAA85885

N-terminal Sequence Analysis Thr23

Predicted Molecular Mass 11.1 kDa

SPECIFICATIONS

Activity Measured by its ability to induce myeloperoxidase release from cytochalasin B-treated human neutrophils. Schröder, J.M. *et al.* (1987) *J. Immunol.* **139**:3474.
The ED₅₀ for this effect is 0.3-0.6 µg/mL.

Measured by its ability to chemoattract BaF3 mouse pro-B cells transfected with human CXCR2.
The ED₅₀ for this effect is 0.03-0.18 µg/mL.

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

Cytomegalovirus (CMV), a member of the beta herpesvirus subfamily, typically causes subclinical or latent infections in the normal adult population. However, CMV can cause congenital disease during pregnancy and is a human opportunistic pathogen that affects immunocompromised individuals. The CMV genome has been shown to contain homologs of cellular immunomodulatory proteins, including US28 (a CC chemokine receptor) and a MHC class I homolog. Virulent CMV clinical isolates have also been shown to carry at least 19 genes, designated *UL133 - UL151*, that are not found in laboratory strains that have lost virulence characteristics. Two of these genes, *UL146* and *UL147*, exhibit sequence similarity to CXC chemokines.

The CMV *UL146* open-reading frame encodes a 117 amino acid residue precursor protein with a predicted 22 residues signal peptide that is cleaved to generate the mature protein. Recombinant UL146 has been shown to induce calcium mobilization, chemotaxis and degranulation of neutrophils.

References:

1. Dairaghi, D. *et al.* (1998) *Sem. Virol.* **8**:377.
2. Cha, T.A. *et al.* (1996) *J. Virol.* **70**:78.