

**DESCRIPTION**

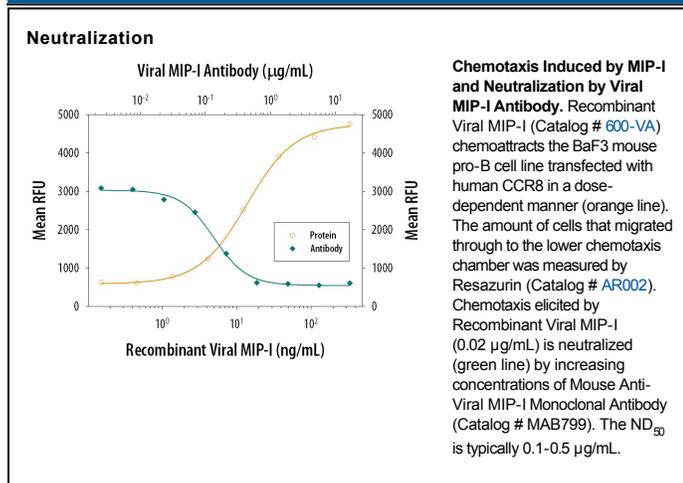
|                           |   |
|---------------------------|---|
| <b>Species Reactivity</b> | Viral   |
| <b>Specificity</b>        | Detects viral MIP-I in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant cytomegalovirus UL146, recombinant human (rh) CCL3, rhCCL22, recombinant mouse (rh) CCL3 or rmCCL22 is observed. |
| <b>Source</b>             | Monoclonal Mouse IgG <sub>2B</sub> Clone # 84420  |
| <b>Purification</b>       | Protein A or G purified from ascites  |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant human herpes virus-8 MIP-I<br>Ala25-Ala95<br>Accession # YP_001129366   |
| <b>Endotoxin Level</b>    | <0.10 EU per 1 µg of the antibody by the LAL method.  |
| <b>Formulation</b>        | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.<br>*Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.   |

**APPLICATIONS**

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

|                       | <b>Recommended Concentration</b>  | <b>Sample</b>                              |
|-----------------------|---|--|
| <b>Western Blot</b>   | 1 µg/mL   | Recombinant Viral MIP-I (Catalog # 600-VA) |
| <b>Neutralization</b> | Measured by its ability to neutralize MIP-I-induced chemotaxis in the BaF3 mouse pro-B cell line transfected with human CCR8. The Neutralization Dose (ND <sub>50</sub> ) is typically 0.1-0.5 µg/mL in the presence of 0.02 µg/mL Recombinant Viral MIP-I. |  |

**DATA**



**PREPARATION AND STORAGE**

|                                |  |
|--------------------------------|--|
| <b>Reconstitution</b>          | Reconstitute at 0.5 mg/mL in sterile PBS.  |
| <b>Shipping</b>                | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.<br>*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C   |
| <b>Stability &amp; Storage</b> | <b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul> |

#### BACKGROUND

Human herpesvirus-8 (HHV-8)/Kaposi's sarcoma-associated herpesvirus (KSHV) is a  $\gamma$  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-I (also termed vMIP-1 $\alpha$ ) cDNA encodes a 95 amino acid (aa) residue precursor protein with a 24 aa residue signal peptide that is cleaved to yield a 71 aa residue mature protein. Among human chemokines, vMIP-I is most closely related to MIP-1 $\alpha$ , sharing approximately 38% 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. 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.

#### References:

1. Moore, P.S. *et al.* (1996) *Science* **274**:5293.
2. Boshoff, C. *et al.* (1997) *Science* **278**:290.