

**DESCRIPTION**

<b>Source</b>	Chinese Hamster Ovary cell line, CHO-derived		
	Viral CCI (Met1-Val258) Accession # P19063	IEGRMD	Human IgG <sub>1</sub> (Pro100-Lys330)
	N-terminus		C-terminus
<b>N-terminal Sequence Analysis</b>	Met17		
<b>Structure / Form</b>	Disulfide-linked homodimer		
<b>Predicted Molecular Mass</b>	52.6 kDa (monomer)		

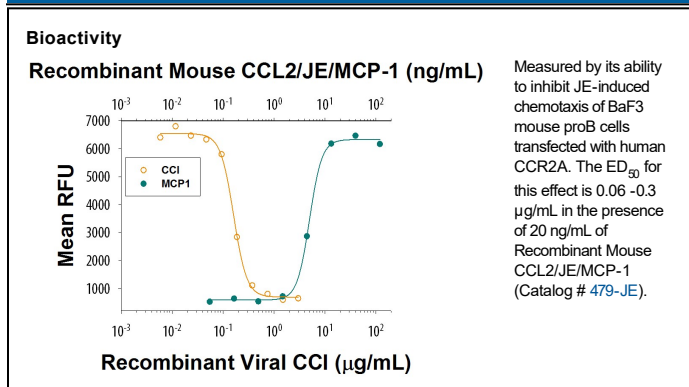
**SPECIFICATIONS**

<b>SDS-PAGE</b>	60-66 kDa, reducing conditions
<b>Activity</b>	Measured by its ability to inhibit JE-induced chemotaxis of BaF3 mouse pro-B cells transfected with human CCR2A. The ED <sub>50</sub> for this effect is 0.06-0.3 µg/mL in the presence of 20 ng/mL of Recombinant Mouse CCL2/JE/MCP-1 (Catalog # 479-JE).
<b>Endotoxin Level</b>	<0.01 EU per 1 µg of the protein by the LAL method.
<b>Purity</b>	>95%, by SDS-PAGE under reducing conditions and visualized by silver stain.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS. See Certificate of Analysis for details.

**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute at 100 µg/mL in PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <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>• 3 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**DATA**



**BACKGROUND**

The family of T1/35 kDa proteins are encoded by the '35K' virulence gene of many poxviruses and are secreted from virus-infected cells. These proteins bind CC-chemokines with high affinity and are termed viral chemokine inhibitor (vCCI). Viral CCI from various poxviruses share multiple stretches of sequence identity and eight conserved cysteine residues (1). The vaccinia virus (strain Lister) vCCI cDNA encodes a 258 amino acid (aa) protein with a putative 17 aa signal peptide (2). Vaccinia virus (strain Lister) vCCI shows greater than 90% aa sequence identity with vCCI from other orthopoxviruses and approximately 40% aa sequence identity with the leporipoxvirus T-1 proteins. vCCI binds with high affinity to many human, mouse, and rat CC-chemokines (1, 3-5). It binds to the same surfaces of these chemokines that are involved in chemokine receptor interactions (4-7). Some CC-chemokines utilize common binding surfaces on vCCI, while others interact with distinct sites on vCCI (8). vCCI inhibits CC-chemokine induced monocyte chemotaxis *in vitro* but does not block cellular effects induced by CXCL5/ENA-78, CXCL8/IL-8, or CXCL10/IP-10 (3-5). *In vivo*, vCCI restricts the infiltration of immune cells into sites of inflammation (3, 9, 10) and also the CC-chemokine induced migration of arterial vascular smooth muscle cells (11).

**References:**

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