

**DESCRIPTION**

<b>Source</b>	Mouse myeloma cell line, NS0-derived			
	Human RANTES (Ser24 - Ser91) Accession # P13501	GS	Human Fractalkine Mucin-like Stalk (Phe103 - Gln341) Accession # P78423	6-His tag
	N-terminus			C-terminus

**N-terminal Sequence** Ser24

**Analysis**

**Predicted Molecular Mass** 34 kDa

**Mass**

**SPECIFICATIONS**

<b>SDS-PAGE</b>	85-105 kDa, reducing conditions
<b>Activity</b>	Measured by its ability to chemoattract BaF3 mouse pro-B cells transfected with human CCR5. The ED <sub>50</sub> for this effect is 0.1-0.5 µg/mL.
<b>Endotoxin Level</b>	<1.0 EU per 1 µg of the protein by the LAL method.
<b>Purity</b>	>90%, 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 sterile 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>	<p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <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>

**BACKGROUND**

Fractalkine (also known as neurotactin and CX<sub>3</sub>CL1) is one of two known transmembrane chemokines and is the only member of the CX<sub>3</sub>C chemokine subfamily. Fractalkine is a type I membrane protein containing a chemokine domain tethered on a long mucin-like stalk that is connected to a transmembrane domain and a C-terminal intracellular domain. Expression of Fractalkine has been detected on endothelial cells, neurons, dendritic cells and a subset of mononuclear phagocytes. The expression of Fractalkine is upregulated in response to inflammatory signals. Fractalkine binds with high affinity to CX<sub>3</sub>CR1 and mediates the tight binding of leukocytes expressing CX<sub>3</sub>CR1 independently of G protein activation under flow conditions. In the RANTES/mucin-like stalk chimera, the chemokine domain of human Fractalkine is replaced by human RANTES (CCL5), a ligand for CCR1, CCR3 and CCR5.

**References:**

1. Haskell, C.A. *et al.* (2000) J. Biol. Chem. **275**:34183.