## **Elabscience**®

## Recombinant Rat CCL5/RANTES Protein (His Tag)

## Catalog Number: PKSR030422

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Species	Rat
Source	E.coli-derived Rat CCL5/RANTES protein Ser25-Ser92, with an N-terminal His
Calculated MW	10 kDa
Observed MW	13 kDa
Accession	P50231
Bio-activity	Not validated for activity
Properties	
Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80
	°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of
	reconstituted samples are stable at $< -20^{\circ}$ C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution of 20mM PB, 500mM NaCl, 2mM EDTA,
	рН 7.4.
	Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants
	before lyophilization.
	Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

## **Elabscience**®

C-C motif chemokine 5(CCL5) is a β-chemokine that plays a primary role in the inflammatory immune response by means of its ability to attract and activate leukocytes. CCL5 is secreted by many cell types at inflammatory sites, and it exerts a wide range of activities through the receptors CCR1, CCR3, CCR4, and CCR5. Inflammatory responses can be impaired by the sequestration of CCL5 by the cytomegalovirus protein US28. Oligomerization of CCL5 on glycosaminoglycans is required for CCR1mediated leukocyte adhesion and activation as well as CCL5's interaction with the chemokine CXCL4/ PF4. The deposition of CCL5 on activated vascular endothelial cells is crucial for monocyte adhesion to damaged vasculature, but CCL5 oligomerization is not required for the extravasation of adherent leukocytes. CCL5 is upregulated in breast cancer and promotes tumor progression through the attraction of proinflammatory macrophages in addition to its actions on tumor cells, stromal cells, and the vasculature.