Recombinant Rat CXCL16 Protein (Trx Tag)



RPES8237

Product Information

Product SKU: Tag:	RPES8237 N-Trx	Expression Host: Reactivity:	E.coli Rat		Size: Accession:	20µg Q6AXU5
Additional Information						
Calculated MW	: 38.8 kDa	Obse	erved MW:	39 kDa		
Sequence:	Asn27-Ala19	8				

Protein Information

Background: C-X-C motif chemokine 16, also known as Small-inducible cytokine B16, SR-PSOX, and CXCL16, is a single-pass type I membrane protein which belongs to the intercrine alpha (chemokine CxC) family. CXCL16 exists in transmembrane and soluble forms. The transmembrane form acts as a scavenger receptor for oxidised LDL whereas the soluble form acts a chemoattractant for mainly CD8+ T cells. CXCL16 is a protein which shares pattern recognition receptor functions, relevant for adhesion and phagocytosis of bacterial products, with the properties of an adhesion molecule and inflammatory chemokine. CXCL16/SR-PSOX is an interferon-gamma-regulated chemokine and scavenger receptor for oxidized low-density lipoprotein that is expressed in atherosclerotic lesions. Proteolytic cleavage of membrane-bound CXCL16 releases soluble CXCL16, which may promote migration of effector T cells and augment a proatherogenic inflammatory response. CXCL16/SR-PSOX can be a potential player in atherogenesis. Enhanced expression of CXCL16 has been demonstrated in atherosclerotic plagues and several properties have been attributed to CXCL16 that could influence the atherosclerotic process. Following in vitro studies suggested that as an adhesion molecule CXCL16/SR-PSOX might mediate T-cell adhesion to the endothelium, as a chemokine-drive T-cell migration, stimulate cell proliferation and elicit inflammatory phenotype in smooth muscle cells (SMC) and , finally, as a scavenger receptor-mediate uptake of atherogenic lipoproteins by macrophages and SMC. CXCR6 and its ligand CXCL16 in regulating metastasis and invasion of cancer. CXCR6 and CXCL16 are up-regulated in multiple cancer tissue types and cancer cell lines relative to normal tissues and cell lines. In addition , both CXCR6 and CXCL16 levels increase as tumor malignancy increases. Thus , CXCL16 and CXCR6 may mark cancers arising in an inflammatory milieu and mediate protumorigenic effects of inflammation through direct effects on cancer cell growth and by inducing the migration and proliferation of tumor-associated leukocytes.

Synonyms: CXL, CXCL, SCYB, CXCLG, CXCLG16, SCYB16, SR-PSOX, Cxcl16, CXL16

- **Endotoxin**: < 10 EU/mg of the protein as determined by the LAL method
- **Formulation**: Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
- **Purity**: > 90% as determined by reducing SDS-PAGE.

Bio-Activity: Not validated for activity

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°C for 3 months.</th>