

ChemWhat Technical Data Sheet (TDS)

Catalog Number:	221-16
Source:	<i>Escherichia coli</i> .
Molecular Weight:	Approximately 9.9 kDa, a single non-glycosylated polypeptide chain containing 88 amino acids.
Quantity:	5µg /25µg /1000µg
AA Sequence:	NQGSVAGSCS CDRTISSGTQ IPQGTLDHIR KYLKAFHRCP FFIRFQLQSK SVCGGSQDQW VRELVDCFER KECGTGHGKS FHHQKHL P
Purity:	> 98 % by SDS-PAGE and HPLC analyses.
Biological Activity:	Fully biologically active when compared to standard. The biological activity determined by a chemotaxis bioassay using murine lymphocytes is in a concentration of 20-1000 ng/ml.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 µm filtered concentrated solution in PBS.
Endotoxin:	Less than 1 EU/µg of rMuCXCL16 as determined by LAL method.
Reconstitution:	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20°C. Further dilutions should be made in appropriate buffered solutions.
Shipping:	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage:	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">● 12 months from date of receipt, -20 to -70 °C as supplied.● 1 month, 2 to 8 °C under sterile conditions after reconstitution.● 3 months, -20 to -70 °C under sterile conditions after reconstitution.
Usage:	ChemWhat Limited in UK offers this branded product for research, development or further evaluation purposes. NOT FOR HUMAN USE.

Murine CXCL16

CXCL16 is a member of the CXC chemokine family. Larger than other chemokines, it is one of the only two transmembrane chemokines in the family and the other is CX3CL1. Mouse CXCL16 has 246 a.a. and consists of a 26 a.a. residue putative signal peptide, an 88 a.a. residue chemokine domain, an 87 a.a. residue mucin-like spacer region, a 22 a.a. residue transmembrane domain, and a 23 a.a. residue cytoplasmic tail. Mouse CXCL16 shares 70 % sequence identity with human CXCL16 in chemokine domain. CXCL16 interacts with the chemokine receptor CXCR6, also known as Bonzo. Expression of CXCL16 is induced by the inflammatory cytokines IFN-gamma and TNF-alpha. Functions of CXCL16 include inducing a strong chemotactic response and calcium mobilization. CXCL16 also acts as a scavenger receptor on macrophages, which specifically binds to OxLDL (oxidized low density lipoprotein), suggesting that it may be involved in pathophysiology such as atherogenesis.