

ChemWhat Technical Data Sheet (TDS)

Catalog Number:	141-06
Source:	<i>Escherichia coli</i> .
Molecular Weight:	Approximately 21.7 kDa, a single, non-glycosylated polypeptide chain containing 187 amino acids
Quantity:	2µg/10µg/1000µg
AA Sequence:	FPTSQVRRGD FTEDTTHNRP VYTTSQVGGL ITYVLREILE MRKELCNGNS DCMNSDDALS ENNKLPEIQ RNDGCFQTGY NQEICLLKIC SGLLEFRFYI EFVKNNLQDN KKDKARVIQS NTETLVHIFK QEIKDSYKIV LPTPTSNALL MEKLESQKEW LRTKTIQLIL KALEEFLKVT MRSTRQT
Purity:	> 95 % by SDS-PAGE and HPLC analyses.
Biological Activity:	Fully biologically active when compared to standard. The ED ₅₀ as determined by a cell proliferation assay using IL-6-dependent murine 7TD1 cells is less than 0.01 ng/ml, corresponding to a specific activity of > 1.0 × 10 ⁸ IU/mg.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.
Endotoxin:	Less than 1 EU/µg of rRtIL-6 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 10mM HCl to a concentration of 0.1 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.

Rat Interleukin-6

Interleukin-6 (IL-6) is encoded by the IL-6 gene and acts as both a pro-inflammatory and anti-inflammatory cytokine. It is secreted by T cells and macrophages to stimulate immune response. IL-6 plays an essential role in the final differentiation of B-cells into Ig-secreting cells involved in lymphocyte and monocyte differentiation. It also induces myeloma and plasmacytoma growth and induces nerve cells differentiation acts on B-cells, T-cells, hepatocytes, hematopoietic progenitor cells and cells of the CNS. The rat IL-6 is a single non-glycosylated polypeptide chain containing 187 amino acids and it signals through a cell-surface type I cytokine receptor complex consisting of the ligand-binding IL-6R α chain (CD126), and the signal-transducing component gp130 (also called CD130). The rat IL-6 shares 40 % and 85 % aa sequence identity with human and mouse IL-6 and it is equally active on human and mouse cells.