

ChemWhat Technical Data Sheet (TDS)

Catalog Number:	141-02
Source:	<i>Escherichia coli</i> .
Molecular Weight:	Approximately 15.5 kDa, a single non-glycosylated polypeptide chain containing 135 amino acids.
Quantity:	5µg/20µg/1000µg
AA Sequence:	APTSSPAKET QQHLEQLLLD LQVLLRGIDN YKNLKLPMML TFKFYLPKQA TELKHLQCLE NELGALQRVL DLTQSKSFHL EDAGNFISNI RVTVVKLGKS ENKFECQFDD EPATVVEFLR RWIAICQSII STMTQ
Purity:	> 97 % 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 murine CTLL-2 cells is less than 0.2 ng/ml, corresponding to a specific activity of > 5.0 × 10 ⁶ IU/mg.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	A 0.2 µm filtered concentrated sterile solution in 10 mM sodium citrate, pH 4.0.
Endotoxin:	Less than 1 EU/µg of rRtIL-2 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.

Rat Interleukin-2

IL-2 is a powerful immunoregulatory lymphokine produced by T-cells in response to antigenic or mitogenic stimulation. It is expressed by CD4+ and CD8+ T cells, γδ T cells, B cells, dendritic cells, and eosinophils. IL-2/IL-2R signaling is required for T-cell proliferation and other fundamental functions which are essential for the immune response. The receptor for IL-2 consists of three subunits (55 kDa IL2Rα, 75 kDa IL2Rβ, 64 kDa common gamma chain γc/IL2Rγ) that are present on the cell surface in varying preformed complexes. Recombinant rat IL-2 is a 15.3 kDa protein containing 134 amino acid residues and it shares about 82 %, 66 %, 66 %, 60 % and 54 % amino acid sequence identity with mouse, human, rhesus macaque, pig and equus caballus IL-2, respectively.