

ChemWhat Technical Data Sheet (TDS)

Catalog Number:	141-22
Source:	<i>Escherichia coli</i> .
Molecular Weight:	Approximately 16.6 kDa, a single non-glycosylated polypeptide chain containing 146 amino acids.
Quantity:	2µg/10µg/1000µg
AA Sequence:	LPINSQCKLE AANFQQPYIV NRTFMLAKEA SLADNNTDVR LIGEELFRGV KAKDQCYLMK QVLNFTLEDV LLPQSDRFQP YMQEVVPFLT KLSIHLSPCH ISGDDQNIQK NVRQLKETVQ KLGESGEIKA IGELDLLFMS LRNACV
Purity:	> 97 % by SDS-PAGE and HPLC analyses.
Biological Activity:	Fully biologically active when compared to standard. The ED ₅₀ as determined by inducing IL-10 secretion of human COLO 205 cells is less than 0.5 ng/ml, corresponding to a specific activity of > 2.0 × 10 ⁶ 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-22 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-22

IL-22 is belonging to IL-10 family of regulatory cytokines which includes IL-10, IL-19, IL-20, IL-22, IL-24 and IL-26. Members of this family share partial homology in their amino acid sequences, but they are dissimilar in their biological functions. Produced by T lymphocytes and dendritic cells, IL-10 contributes to the inflammatory response in vivo. IL-22 signals through CRF2-4 and IL-22. It along with IL-17 is rapidly produced by splenic L_{Ti}-like cells and can be also produced by Th17 cells and likely plays a role in the coordinated response of both adaptive and innate immune systems. Recombinant rat Interleukin-22 contains 146 amino acids and it has approximately 79 % and 92 % amino acid sequence identity with human and murine IL-22.