

**ChemWhat Technical Data Sheet (TDS)**

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<b>Catalog Number:</b>	101-15
<b>Source:</b>	<i>Escherichia coli</i> .
<b>Molecular Weight:</b>	Approximately 12.9 kDa, a single non-glycosylated polypeptide chain containing 114 amino acids.
<b>Quantity:</b>	2µg/10µg/1000µg
<b>AA Sequence:</b>	NWVNVISDLK KIEDLIQSMH IDATLYTESD VHPSCKVTAM KCFLELQVI SLESGDASIH DTVENLILA NNSLSSNGNV TESGCKECEE LEEKNIKEFL QSFVHIVQMF INTS
<b>Purity:</b>	> 97 % by SDS-PAGE and HPLC analyses.
<b>Biological Activity:</b>	Fully biologically active when compared to standard. The ED <sub>50</sub> as determined by a cell proliferation assay using murine CTLL-2 cells is less than 0.5 ng/ml, corresponding to a specific activity of > 2.0 × 10 <sup>6</sup> IU/mg.
<b>Physical Appearance:</b>	Sterile Filtered White lyophilized (freeze-dried) powder.
<b>Formulation:</b>	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.
<b>Endotoxin:</b>	Less than 1 EU/µg of rHuIL-15 as determined by LAL method.
<b>Reconstitution:</b>	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.
<b>Shipping:</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage:</b>	Use a <b>manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"><li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li><li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li><li>● 3 months, -20 to -70 °C under sterile conditions after reconstitution.</li></ul>
<b>Usage:</b>	<b>ChemWhat Limited in UK offers this branded product for research, development or further evaluation purposes. NOT FOR HUMAN USE.</b>

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### ***Human Interleukin-15***

Human Interleukin-15 (IL-15) is expressed by the IL15 gene located on the chromosome 4. It shares approximately 97 % and 73 % sequence identity with simian and murine IL-15, respectively. Both human IL-15 and simian IL-15 are active on murine cells. IL-15 is secreted by mononuclear phagocytes (and some other cells), especially macrophages following infection by virus. It possesses a variety of biological functions, including stimulating and maintaining of cellular immune responses, especially regulating T and natural killer (NK) cell activation and proliferation. In additionally, it shares many biological properties with IL-2, including T, B and NK cell-stimulatory activities. IL-15 signals through a complex composed of IL-2/IL-15 receptor beta chain. Although IL-15 lacks sequence homology with IL-2, it has recently been shown that both the beta and gamma chains of the IL-2 receptor are utilized for IL-15 binding and signaling. In addition, an IL-15 specific binding protein has also been cloned from a mouse T cell clone.