

**ChemWhat** Recombinant Human Parathyroid Hormone 1-34  
A brand under Watson (rHuPTH1-34)

**ChemWhat Technical Data Sheet (TDS)**

<b>Catalog Number:</b>	301-03
<b>Source:</b>	<i>Escherichia coli</i> .
<b>Molecular Weight:</b>	Approximately 4.1 kDa, a single non-glycosylated polypeptide chain containing 34 amino acids.
<b>Quantity:</b>	20µg /100µg/1000µg
<b>AA Sequence:</b>	SVSEIQLMHN LGKHLNSMER VEWLRKKLQD VHNF
<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 its ability to induce cAMP accumulation in murine MC3T3E1 cells is less than 50 ng/ml, corresponding to a specific activity of > 2.0 × 10 <sup>4</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 7.0.
<b>Endotoxin:</b>	Less than 1EU/µg of rHuPTH1-34 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>	<b>Use a 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>

***Human Parathyroid Hormone 1-34***

Parathyroid hormone (PTH) is a single polypeptide of 84 amino acids. It is a critical hormone in the regulation of Ca<sup>2+</sup> homeostasis, secreted by the parathyroid glands, which promote release of calcium from bone to extracellular fluid by activating osteoblasts and inhibiting osteoclasts, indirectly promote increased intestinal absorption of calcium, and promote renal tubular reabsorption of calcium and increased renal excretion of phosphates. It is a major regulator of bone metabolism. Secretion of parathyroid hormone increases when the level of calcium in the extracellular fluid is low.

The amino terminal (1-34) fragment of parathyroid hormone, called PTH (1-34) reproduces all the activity of the full length mature hormone and has been used therapeutically for treatment of osteoporosis.