

ChemWhat Technical Data Sheet (TDS)

Catalog Number:	651-01
Source:	<i>Escherichia coli</i> .
Molecular Weight:	Approximately 4.2 kDa, a single non-glycosylated polypeptide chain containing 39 amino acids.
Quantity:	20µg /100µg /1000µg
AA Sequence:	HGEGTFTSDL SKQMEEEEAVR LFIEWLKNNGG PSSGAPPPS
Purity:	> 96 % by SDS-PAGE and HPLC analyses.
Biological Activity:	<ol style="list-style-type: none">1. Regulates Glucose levels rapidly;2. Reduces Insulin resistance;3. Reduces Glucagon;4. Reduces HbA1c;5. Stimulates beta cell growth which stimulates insulin production.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 µm filtered solution in PBS, pH 7.4.
Endotoxin:	Less than 10 EU/mg of rExendin-4 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.

Exendin-4

Exendin-4 is a novel 39-amino acid peptide isolated from the venom of the Gila monster *Heloderma suspectum*. It shares 53 % sequence homology with GLP-17-36amide and interacts with the same membrane receptor. Exendin-4 enhances glucose-dependent insulin secretion, suppresses inappropriately elevated glucagon secretion, and slows gastric emptying in vivo. It also promotes β-cell proliferation and neogenesis in vitro and in animal models. Recombinant Exendin-4 is *E. coli* expression of a synthetic DNA sequence encoding the 39 amino acid of Exendin-4.