

Recombinant Human Insulin-like Growth Factor-1 V44M (rHuIGF-1 V44M)

ChemWhat Technical Data Sheet (TDS)

Catalog Number:	105-01V1
Source:	<i>E. coli</i>
Molecular Weight:	Approximately 7.7 kDa, a single polypeptide chain containing 70 amino acids.
Quantity:	25µg/100µg/1mg
AA Sequence:	GPETLCGAEL VDALQFVCGD RGFYFNKPTG YGSSRRAPQ TGIMDECCFR SCDLRRLEMY CAPLKPAKSA
Purity:	> 95% by SDS-PAGE analyses.
Biological Activity:	Test in process.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 µm filtered concentrated solution in PBS.
Endotoxin:	Less than 0.1 EU/µg of rHuIGF-1 V44M 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.

Human Insulin-like Growth Factor-1 V44M

IGF-1 belonged to the insulin gene family, is a mitogenic polypeptide growth factor that stimulate the proliferation and survival of various cell types including muscle, bone, and cartilage tissue in vitro. It is produced primarily by the liver as an endocrine hormone as well as in target tissues in a paracrine/autocrine fashion. The production of IGF-1 is stimulated by growth hormone (GH) and can be retarded by undernutrition, growth hormone insensitivity, lack of growth hormone receptors, or failures of the downstream signaling pathway post GH receptor including SHP2 and STAT5B.