

# Recombinant Human Insulin-like Growth Factor-1 V44M

## Information

Gene ID			
Accession #			
Alternate Names			
Source	E. coli		
M.Wt	Approximately 7.7 kDa, a single polypeptide chain containing 70 amino acids.		
AA Sequence	GPETLCGAEL VDALQFVCGD RGFYFNKPTG YGSSSRRAPQ TGIMDECCFI SCDLRRLEMY CAPLKPAKSA		
Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.		
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles - 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		
Formulation	Lyophilized from a 0.2 $\mu$ m filtered concentrated solution in PBS.		
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 $\leq$ -20°C. Further dilutions should be made in appropriate buffered solutions.		
Biological Activity	Test in process.		
Shipping Condition	Gel pack.		
Handling	Centrifuge the vial prior to opening.		
Usage	For Research Use Only! Not to be used in humans.		
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#### Components and Storage

Components	100µg	500µg	
Recombinant Human Insulin-like Growth Factor-1 V44M	100µg	500µg	

Use a manual defrost freezer and avoid repeated freeze-thaw cycles

- 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

Quality Control	19. 19. 19.
Purity	> 95% by SDS-PAGE analyses.
Endotoxin	Less than 0.1 EU/ $\mu$ g of rHuIGF-1 V44M as determined by LAL method.

### Description

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.

## Reference

