

PrimeGene[®] LR3 IGF-I & IGF-I

Wise Choice! For Greater Productivity of Your Cell Culture !

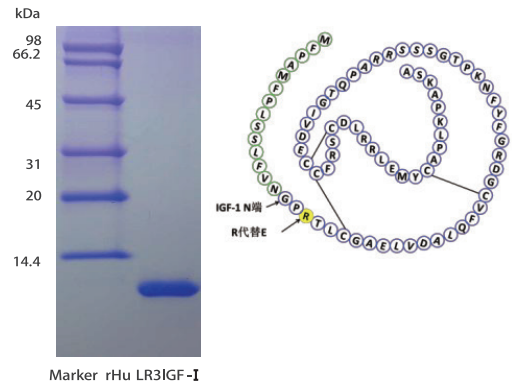
PrimeGene's Cell Culture Growth Factors are animal-free recombinant proteins, developed to provide the benefits of serum-derived supplementation while maintaining a defined, consistent, and animal-free process. PrimeGene growth factors guarantee the highest quality supplements for your cell culture applications.

PrimeGene[®] LR3 IGF-I

PrimeGene[®] LR3 IGF-I has been a demanding cell culture growth factor used by industry leading biotech companies for commercial biologic processes, specifically designed and manufactured for mammalian cell culture to support large-scale manufacturing of recombinant Biopharmaceuticals. 200 times more potent than insulin and 3 times more stable in cell culture, available as a lyophilized powder.

Key benefits – LR3 IGF-I

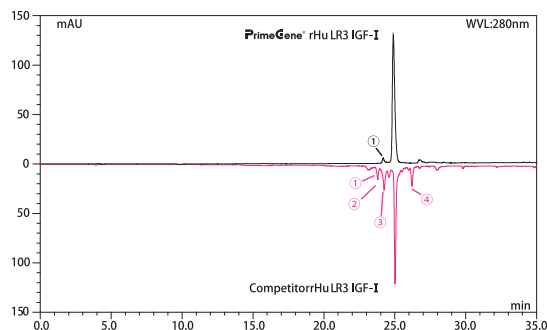
- Increased cell density, higher viability and extended culture duration
- 200 times more potent than Insulin and 3 times more stable in cell culture
- Highest level of purity: >98% from SDS-PAGE, >95% from RP-HPLC
- High bioactivity: > 1.0 × 10⁵ IU/mg by the stimulation of protein synthesis using rat L6 myoblasts
- low endotoxin: <0.01 EU/μg
- Broader Solubility: Distilled water, PBS, 100 mM acetic acid, 10 mM HCl
- Compatible with multiple mammalian cell types including CHO clones, HEK 293, Vero, PerC6, MDCK.
- ISO 9001:2008 certified, animal-free manufacturing process for regulatory acceptance
- Security supply



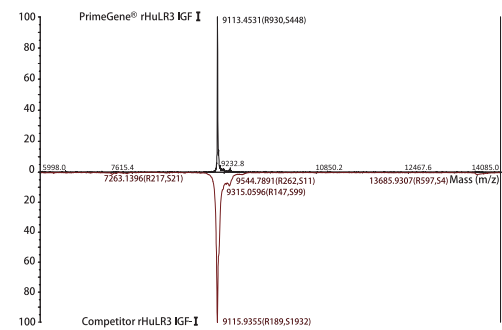
SDS-PAGE under reducing condition, purity is >98%, the single clear band is located at 9 kDa.

Comparison with Competitors

Higher Purity



RP-HPLC Results: The purity of PrimeGene LR3 IGF-I is > 95%. The purity of a competitor's LR3 IGF-I is about 65%, containing 1 - 4 small peaks of misfolded isomers.



ESI Chromatogram Results: the peak of PrimeGene LR3 IGF-I is located at 9113 Da, exactly matched with theoretical value.

Product List

Cat. #	Product Description	Size A	Size B	Size C	Special Order
105-03	rHuLR3 IGF-I, Media Grade	1mg	5mg	50mg	Inquiry
105-03U	rHuLR3 IGF-I, Receptor Grade	100μg	1mg	10mg	Inquiry



Certification

■ Background—LR3 IGF-I

Specificity is the key to increased productivity

Unlike insulin, LR3 IGF-I specifically targets and activates the type I IGF Receptor (IGF-IR), resulting in greater activation of downstream signaling cascades responsible for proliferation and inhibiting apoptosis. Greater activation of these key pathways results in increased cell density, higher viability and extended cell culture productivity.

Reduce process complexity through increased potency and stability

LR3 IGF-I is more than 200 times more potent than insulin and up to 3 times more stable in cell culture for longer efficacy. Easy cell culture addition with reduced feeding, simplifies process complexity while maintaining optimal performance.

A distinct biological advantage

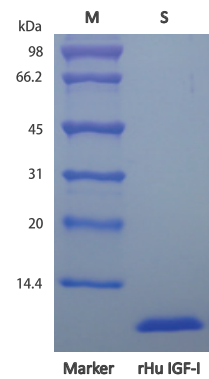
All mammalian cells secrete IGF Binding Proteins (IGFBPs) which bind to and inhibit native IGF-I. The substitution of an arginine for glutamic acid at position three in LR3 IGF-I, in conjunction with the 13 amino acid N-terminal extension peptide, results in > 1000 fold reduced affinity for IGFBPs, thus enhancing its bioavailability and effectiveness in comparison to native IGF-I.

PrimeGene® IGF-I

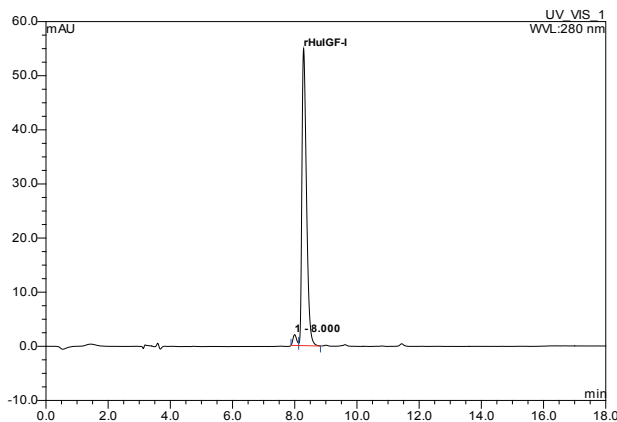
For serum-free proliferation and maintenance of cell lines during the fermentation stage of biologics production.

Key benefits – IGF-I

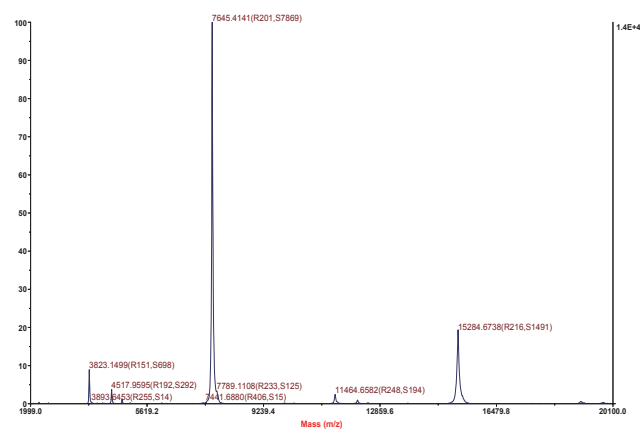
- Highest level of purity: > 97% from SDS-PAGE, > 97% from RP-HPLC
- High bioactivity: > 1.0×10^5 IU/mg as determined by a cell proliferation assay using serum free human MCF-7 cells
- low endotoxin: <0.01 EU/μg
- Broader Solubility: Distilled water, PBS, 100 mM acetic acid and 10 mM HCl
- ISO 9001:2008 certified, animal-free manufacturing process for regulatory acceptance
- Security supply



SDS-PAGE under reducing condition, purity is > 97%, the single clear band is located at 7 kDa.



RP-HPLC Results: The purity of PrimeGene rHu IGF-I is > 97%.



ESI Chromatogram Results: the peak of PrimeGene LR3 IGF-I is located at 7645Da, exactly matched with theoretical value.

■ Product List

Cat. #	Product Description	Size A	Size B	Size C	Special Order
105-01	rHuIGF-I	10 μg	50 μg	1 mg	Inquiry
105-01N	rHuIGF-I, ¹⁵ N	100 μg	500 μg	1 mg	Inquiry

PrimeGene[™]
a biotechnne brand

Business

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Manufacture Site

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