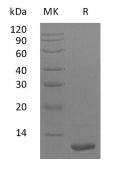


Summary

| Name | LR3 IGF-I/Long R3 IGF-1 |
|--------------------------|--|
| Purity | Greater than 95% as determined by reducing SDS-PAGE |
| Endotoxin level | <1 EU/µg as determined by LAL test. |
| Construction | Recombinant Human LR3 Insulin-Like Growth Factor-I is produced by our E.coli expression system and the target gene encoding Gly49-Ala118 is expressed. |
| Accession # | P05019 |
| Host | E.coli |
| Species | Human |
| Predicted Molecular Mass | 9.1 KDa |
| Formulation | Lyophilized from a 0.2 μ m filtered solution of 20mM NaAc-HAc, 4% Mannitol, pH 4.5. |
| Shipping | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below. |
| Stability&Storage | Lyophilized protein should be stored at \leq -20°C, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8°C for 2-7 days. Aliquots of reconstituted samples are stable at \leq -20°C for 3 months. |
| Reconstitution | Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100µg/ml. Dissolve the lyophilized protein in 50mM Acetic Acid. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100µg/ml. Dissolve the lyophilized protein in 50mM Acetic Acid. Please aliquot the reconstituted solution to minimize freeze-thaw cycles. |

SDS-PAGE image



Background



| Alternative Names | Insulin-Like Growth Factor I; IGF-I; Mechano Growth Factor; MGF; Somatomedin-C; IGF1; IBP1 |
|-------------------|--|
| Background | Insulin-like growth factor I (IGF1) belongs to the family of insulin-like growth factors that are structurally homologous to proinsulin. Mature IGFs are generated by proteolytic processing of inactive precursor proteins, which contains the N- and C-terminal propeptide regions. Mature human IGF-I consisting of 70 amino acids has 94% identity with mouse IGF-I and exhibits cross-species activity. IGF-1 binds IGF-IR, IGF-IIR, and the insulin receptor and plays a key role in cell cycle progression, cell proliferation and tumor progression. IGF-1 expression is regulated by growth hormone. R3 IGF-1 is an 83 amino acid analog of IGF-1 comprising the complete human IGF-1 sequence with the substitution of an Arg (R) for the Glu(E) at position three, hence R3, and a 13 amino acid extension peptide at the N terminus. R3 IGF-1 has been produced with the purpose of increasing biological activity. R3 IGF-1 is significantly more potent than human IGF-I in vitro. |

Note

For Research Use Only, Not for Diagnostic Use.