

## **Recombinant Rat IGF1**

Cat No:HR2R2270

For research use only

## Overview

| Quantity              | 250 ?g  |
|-----------------------|---|
| Gene Symbol           | IGF1  |
| Gene ID               | 24482   |
| Accession             | P08025  |
| Alternative<br>Name   | Somatomedin, Insulin-like growth factor I, IGF-I, Igf1<br>Pr/>Recombinant Rat Insulin-Like Growth Factor (IGF1)   |
| Species               | Rat   |
| Source                | E. coli   |
| Description           | Insulin-like growth factor I, also known as somatomedin C, is the dominant effector of growth hormone and is structurally homologous to proinsulin. Human IGF-I is synthesized as two precursor isoforms with N- and alternate C- terminal propeptides (1). These isoforms are differentially expressed by various tissues (1). The 7.6 kDa mature IGF-I is identical between isoforms and is generated by proteolytic removal of the N- and C- terminal regions. Mature human IGF-I shares 94% and 96% aa sequence identity with mouse and rat IGF-I, respectively (2), and exhibits cross-species activity. It shares 64% aa sequence identity with mature human IGF-II. Circulating IGF-I is produced by hepatocytes, while local IGF-I is produced by many other tissues in which it has paracrine effects. |
| Functions             | The ED(50) was determined by a cell proliferation assay using FDC-P1 cells is ? 1.0 ng/mL, corresponding to a specific activity of ? 1.0 x 10^6 units/mg.   |
| Formulation           | Recombinant Rat IGF1 was lyophilized from a 0.2 ?m filtered PBS solution, pH 7.4.   |
| Solubility            | A quick spin of the vial followed by reconstitution in distilled water to a concentration not less than 0.1 mg/mL. This solution can then be diluted into other buffers.  |
| Appearance            | Lyophilized Powder  |
| Molecular<br>Weight   | 8   |
| Purity                | >95% as determined by SDS-PAGE  |
| Concentration         | < 1.0 EU/?g of recombinant protein as determined by the LAL method.   |
| Shipping<br>Condition | Ambient Temperature   |
| Storage<br>Condition  | The lyophilized protein is stable for at least one year from date of receipt at -70?C. Upon reconstitution, this cytokine can be stored in working aliquots at 2? - 8?C for one month, or at -20?C for six months, with a carrier protein without detectable loss of activity. Avoid repeated freeze/thaw cycles www.bioelsa.com  |

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