

## Datasheet for ABIN6720285 IGF1 ELISA Kit



[Go to Product page](#)

### 1 Image

#### Overview

Quantity:	1 kit
Target:	IGF1
Reactivity:	Rat
Method Type:	Sandwich ELISA
Detection Range:	62.5 pg/mL - 4000 pg/mL
Minimum Detection Limit:	62.5 pg/mL
Application:	ELISA

#### Product Details

Purpose:	Sandwich ELISA for Quantitative Detection of Antigen
Sample Type:	Cell Culture Supernatant, Plasma (EDTA - heparin), Serum
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Characteristics:	<p>Synonyms: IBP1, IGF 1, IGF I, IGF IA, IGF IB, IGF-I, IGF1, IGF1_HUMAN, IGF1A, IGF1, Insulin like growth factor 1 (somatomedin C), Insulin like growth factor IA, Insulin like growth factor IB, Insulin-like growth factor I, Mechano growth factor, MGF, Somatomedia C, Somatomedin C, Somatomedin-C</p> <p>Background: Insulin-like growth factor 1(IGF-1) that was once called somatomedin C, is a polypeptide protein hormone similar in molecular structure to insulin. It plays an important role in childhood growth and continues to have anabolic effects in adults. Human IGF1 is a single chain 70-amino acid polypeptide cross-linked by 3 disulfide bridges, with a calculated molecular</p>

## Product Details

---

mass of 7.6 kD. The IGF1 gene, mapped on 12q22-q24.1, contains 5 exons. Exons 1-4 encode the 195-amino acid precursor(IGF1B), and exons 1, 2, 3, and 5 encode the 153-residue peptide(IGF1A). The structure of IGF1 resembles that of IGF2. And the IGF1 and IGF2 genes have complex structures with multiple promoters. The expression of both genes is regulated at the levels of transcription, RNA processing, and translation. IGF-1 is produced primarily by the liver as an endocrine hormone as well as in target tissues in a paracrine/autocrine fashion. Moreover, approximately 98 % of IGF-1 is always bound to one of 6 binding proteins(IGF-BP). Furthermore, IGF-1 is one of the most potent natural activators of the AKT signaling pathway, a stimulator of cell growth and multiplication and a potent inhibitor of programmed cell death.

Gene Name: IGF1

Production: Natural and recombinant rat IGF-1. There is no detectable cross-reactivity with other relevant proteins.

Standard: Expression system for standard: E.coli, Immunogen sequence: G49-A118

## Target Details

---

Target:	IGF1
Alternative Name:	IGF-1 (IGF1 Products)
Gene ID:	24482
NCBI Accession:	<a href="#">NP_001075946</a>
UniProt:	<a href="#">P08025</a>
Pathways:	<a href="#">RTK Signaling</a> , <a href="#">Intracellular Steroid Hormone Receptor Signaling Pathway</a> , <a href="#">Peptide Hormone Metabolism</a> , <a href="#">Hormone Activity</a> , <a href="#">Regulation of Intracellular Steroid Hormone Receptor Signaling</a> , <a href="#">Regulation of Hormone Metabolic Process</a> , <a href="#">Regulation of Hormone Biosynthetic Process</a> , <a href="#">Stem Cell Maintenance</a> , <a href="#">Glycosaminoglycan Metabolic Process</a> , <a href="#">Regulation of Carbohydrate Metabolic Process</a> , <a href="#">Autophagy</a> , <a href="#">Smooth Muscle Cell Migration</a> , <a href="#">Activated T Cell Proliferation</a> , <a href="#">Positive Regulation of fat Cell Differentiation</a>

## Application Details

---

Application Notes:	Application Note: Useful in Sandwich ELISA for Quantitative Detection of Antigen. Aliquot 0.1 mL per well of the 4000pg/mL, 2000pg/mL,1000pg/mL, 500pg/mL, 250pg/mL, 125pg/mL, 62.5pg/mL rat IGF-1 standard solutions into the precoated 96-well plate. Add 0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each properly diluted sample of rat cell culture supernates, serum or plasma(heparin, EDTA) to each empty well. It is
--------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

## Application Details

recommended that each rat IGF-1 standard solution and each sample be measured in duplicate.

Blood Product Anticoagulant: Heparin Sodium

ELISA Dilution: 62.5pg/mL-4000pg/mL

Sample Volume: 100  $\mu$ L

Plate: Pre-coated

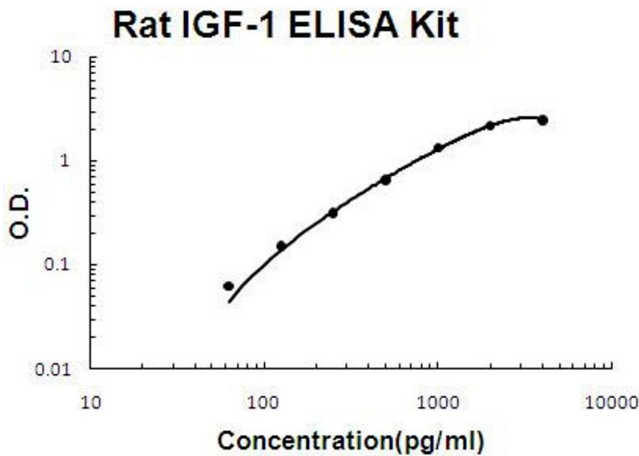
Restrictions: For Research Use only

## Handling

Storage: RT,4 °C,-20 °C

Storage Comment: Store vials at 4°C prior to opening. Centrifuge product if not completely clear after standing at room temperature. This product is stable for 6 months at 4°C as an undiluted liquid. Dilute only prior to immediate use. For extended storage freeze at -20°C or below for 12 months. Avoid cycles of freezing and thawing.

## Images



### ELISA

**Image 1.** Rat IGF-1 Accusignal ELISA Kit Rat IGF-1 AccuSignal ELISA Kit standard curve. Assay Range: 62.5pg/ml-4000pg/ml. Sensitivity: <5pg/ml.