



Rat growth hormone,GH ELISA KIT

Product Code	CSB-E07342r
Abbreviation	GH1
Target Name	growth hormone 1
Uniprot No.	P09916
Alias	GH, GH-N, GHN, IGHD1B, hGH-N, pituitary growth hormone
Product Type	ELISA Kit
Immunogen Species	Rattus norvegicus (Rat)
Sample Types	serum, plasma, cell culture supernates, tissue homogenates
Detection Range	3.12 pg/mL-200 pg/mL
Sensitivity	0.78 pg/mL
Assay Time	1-5h
Sample Volume	50-100ul
Detection Wavelength	450 nm
Lead Time	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
Research Area	Signal Transduction
Quality Control	A microplate reader capable of measuring absorbance at 450 nm, with the correction wavelength set at 540 nm or 570 nm. An incubator can provide stable incubation conditions up to 37°C±5°C. Centrifuge Vortex Squirt bottle, manifold dispenser, or automated microplate washer Absorbent paper for blotting the microtiter plate 50-300ul multi-channel micropipette Pipette tips Single-channel micropipette with different ranges 100ml and 500ml graduated cylinders Deionized or distilled water Timer Test tubes for dilution
Gene Names	Ghrh
Tag Info	quantitative
Protein Description	Sandwich
Component	A micro ELISA plate --The 96-well plate has been pre-coated with an anti-rat GH antibody. This dismountable microplate can be divided into 12 x 8 strip plates. Two vials lyophilized standard --Dilute a bottle of the standard at dilution series, read the OD values, and then draw a standard curve.



One vial Biotin-labeled GH antibody (100 x concentrate) (120 µl/bottle) --Act as the detection antibody.

One vial HRP-avidin (100 x concentrate) (120 µl/bottle) --Bind to the detection antibody and react with the TMB substrate to make the solution chromogenic.

One vial Biotin-antibody Diluent (15 ml/bottle) --Dilute the high concentration Biotin-antibody to an appropriate working solution.

One vial HRP-avidin Diluent (15 ml/bottle) --Dilute the high concentration HRP-avidin solution to an appropriate solution.

One vial Sample Diluent (50 ml/bottle)--Dilute the sample to an appropriate concentration.

One vial Wash Buffer (25 x concentrate) (20 ml/bottle) --- Wash away unbound or free substances.

One vial TMB Substrate (10 ml/bottle) --Act as the chromogenic agent. TMB interacts with HRP, eliciting the solution turns blue.

One vial Stop Solution (10 ml/bottle) --Stop the color reaction. The solution color immediately turns from blue to yellow.

Four Adhesive Strips (For 96 wells) --Cover the microplate when incubation.
An instruction manual

Description

This Rat GH1 ELISA Kit was designed for the quantitative measurement of Rat GH1 protein in serum, plasma, cell culture supernates, tissue homogenates. It is a Sandwich ELISA kit, its detection range is 3.12 pg/mL-200 pg/mL and the sensitivity is 0.78 pg/mL.

Target Details

This protein is a member of the somatotropin/prolactin family of hormones which play an important role in growth control. The gene, along with four other related genes, is located at the growth hormone locus on chromosome 17 where they are interspersed in the same transcriptional orientation; an arrangement which is thought to have evolved by a series of gene duplications. The five genes share a remarkably high degree of sequence identity. Alternative splicing generates additional isoforms of each of the five growth hormones, leading to further diversity and potential for specialization. This particular family member is expressed in the pituitary but not in placental tissue as is the case for the other four genes in the growth hormone locus. Mutations in or deletions of the gene lead to growth hormone deficiency and short stature.

Product Precision

Intra-assay Precision (Precision within an assay): CV%<8%

Three samples of known concentration were tested twenty times on one plate to assess.

Inter-assay Precision (Precision between assays): CV%<10%

Three samples of known concentration were tested in twenty assays to assess.

Linearity

To assess the linearity of the assay, samples were spiked with high concentrations of rat GH in various matrices and diluted with the Sample Diluent to produce samples with values within the dynamic range of the assay.

?	Sample	Serum(n=4)
1:100	Average %	98
	Range %	94-105



1:200	Average %	96
	Range %	90-102
1:400	Average %	100
	Range %	94-106
1:800	Average %	93
	Range %	89-97

Recovery

The recovery of rat GH spiked to levels throughout the range of the assay in various matrices was evaluated. Samples were diluted prior to assay as directed in the Sample Preparation section.

Sample Type	Average % Recovery	Range
Serum (n=5)	92	87-98
EDTA plasma (n=4)	96	91-101

Typical

These standard curves are provided for demonstration only. A standard curve should be generated for each set of samples assayed.

