abcam

Product datasheet

Recombinant human IGF2 protein ab155617

2 Images

Description

Product name Recombinant human IGF2 protein

Biological activity Measured in a serum-free cell proliferation assay using MCF7 Human breast cancer cells.

The ED₅₀ for this effect is typically 2-10 ng/ml.

Purity > 95 % SDS-PAGE.

Lyophilized from 0.22µm filtered solution

Endotoxin level < 1.000 Eu/µg
Expression system HEK 293 cells
Accession P01344-1

Protein length Protein fragment

Animal free No

Nature Recombinant

Species Human

Sequence AYRPSETLCGGELVDTLQFVCGDRGFYFSRPASRVSRRS

RGIVEECCFRS CDLALLETYCATPAKSE

Predicted molecular weight 34 kDa

Molecular weight information The protein migrates as 35-38 kDa under reducing (R) condition (SDS-PAGE) due to

glycosylation.

Amino acids 25 to 91

Tags Fc tag N-Terminus

Additional sequence information This protein carries a human lgG1 Fc tag at the N-terminus.

Specifications

Our Abpromise guarantee covers the use of ab155617 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications Functional Studies

SDS-PAGE

Form Lyophilized

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Preparation and Storage

Stability and Storage

Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

pH: 7.4

Constituents: 5% Trehalose, 0.75% Glycine, 0.605% Tris

This product is an active protein and may elicit a biological response in vivo, handle with caution.

Reconstitution

Reconstitute with sterile deionized water to a concentration of 1 mg/ml.

General Info

Function

The insulin-like growth factors possess growth-promoting activity. In vitro, they are potent mitogens for cultured cells. IGF-II is influenced by placental lactogen and may play a role in fetal development.

Preptin undergoes glucose-mediated co-secretion with insulin, and acts as physiological amplifier of glucose-mediated insulin secretion. Exhibits osteogenic properties by increasing osteoblast mitogenic activity through phosphoactivation of MAPK1 and MAPK3.

Involvement in disease

Epigenetic changes of DNA hypomethylation in IGF2 are a cause of Silver-Russell syndrome (SIRS) [MIM:180860]. SIRS is a clinically heterogeneous condition characterized by severe intrauterine growth retardation, poor postnatal growth, craniofacial features such as a triangular shaped face and a broad forehead, body asymmetry, and a variety of minor malformations.

Sequence similarities

Belongs to the insulin family.

Post-translational modifications

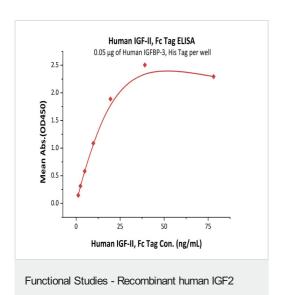
O-glycosylated with a core 1 or possibly core 8 glycan.

Cellular localization

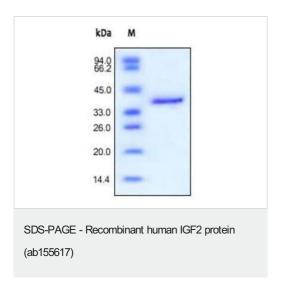
protein (ab155617)

Secreted.

Images



Immobilized Human IGFBP-3, His Tag at 0.5 μ g/mL (100 μ L/well) can bind Human IGF-II, Fc Tag with a linear range of 1-20 ng/mL.



SDS-PAGE analysis of reduced ab155617 stained overnight with Coomassie Blue.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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