

Product datasheet

Recombinant Human IGF2 protein (Active) ab283420

[4 Images](#)

Description

Product name	Recombinant Human IGF2 protein (Active)
Biological activity	Fully biologically active determined by the dose dependent proliferation of MCF7 cells. ED ₅₀ is ≤5.8 ng/mL, corresponding to a specific activity of 1.72 x 10 ⁵ units/mg.
Purity	≥ 95 % HPLC.
Endotoxin level	≤0.005 Eu/μg
Expression system	HEK 293 cells
Accession	<u>P01344</u>
Protein length	Full length protein
Animal free	No
Carrier free	Yes
Nature	Recombinant
Species	Human
Sequence	AYRPSETLCGGELVDTLQFVCGDRGFYFSRPASRVSRRS RGVIECCFRS CDLALLETYCATPAKSE
Predicted molecular weight	20 kDa
Amino acids	25 to 91
Additional sequence information	N-terminal glycine.
Description	Human IGF2 protein

Specifications

Our **Abpromise guarantee** covers the use of **ab283420** in the following tested applications.

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

Applications	SDS-PAGE
	Mass Spectrometry
	HPLC
	Cell Culture
	Biological Activity

Form Lyophilized

Preparation and Storage

Stability and Storage Shipped at Room Temperature. Store at Room Temperature.
pH: 7.4
Constituents: 0.727% Dibasic monohydrogen potassium phosphate, 0.248% Monobasic dihydrogen potassium phosphate, 10.26% Trehalose
This product is an active protein and may elicit a biological response in vivo, handle with caution.

Reconstitution Store lyophilized form at room temperature. Reconstitute in PBS, aliquot and store at -80°C for 12 months or +4°C for 1 week. Avoid repeated freeze-thaw. Lyophilized contents may appear as either a translucent film or a white powder. This variance does not affect the quality of the product.

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.

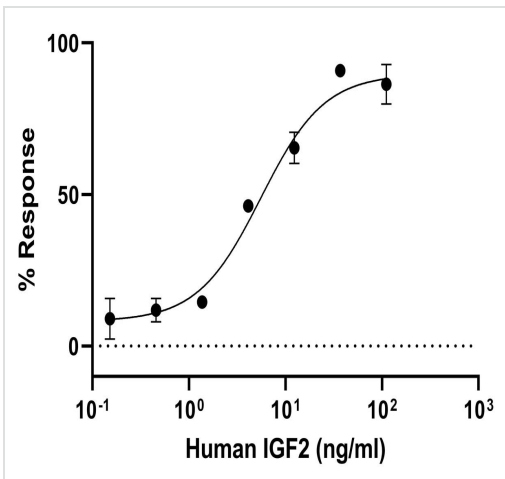
Involvement in disease Epigenetic changes of DNA hypomethylation in IGF2 are a cause of Silver-Russell syndrome (SIRS) [MIM:180860]. SIRS is a clinically heterogeneous condition characterized by severe intrauterine growth retardation, poor postnatal growth, craniofacial features such as a triangular 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 Secreted.

Images



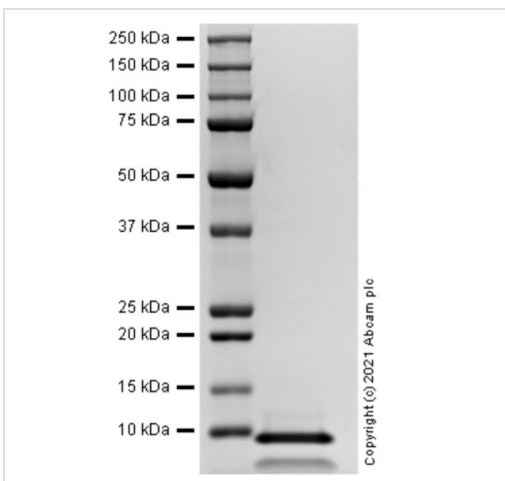
Biological Activity - Recombinant Human IGF2 protein (Active) (ab283420)

Functional analysis of ab283420.

Fully biologically active determined by the dose dependent proliferation of MCF7 cells. ED₅₀ is ≤5.8 ng/mL, corresponding to a specific activity of 1.72 x 10⁵ units/mg.

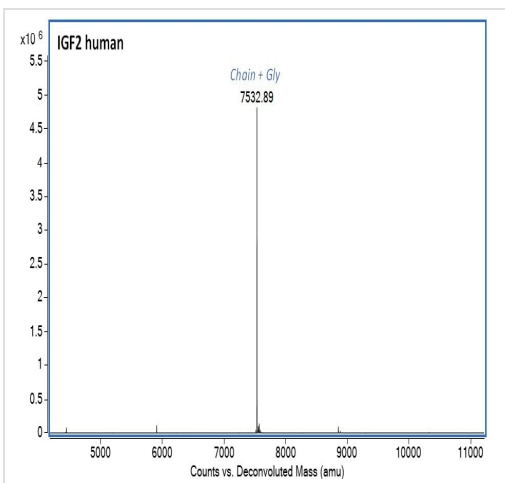
Cell based assay testing is performed on the first lot of protein only and is provided as a reference for protein activity; subsequent lots of protein must pass all biophysical quality control parameters that meet the same parameters as the first lot.

Lot GR3430138-2



SDS-PAGE - Recombinant Human IGF2 protein (ab283420)

SDS-PAGE analysis of ab283420.

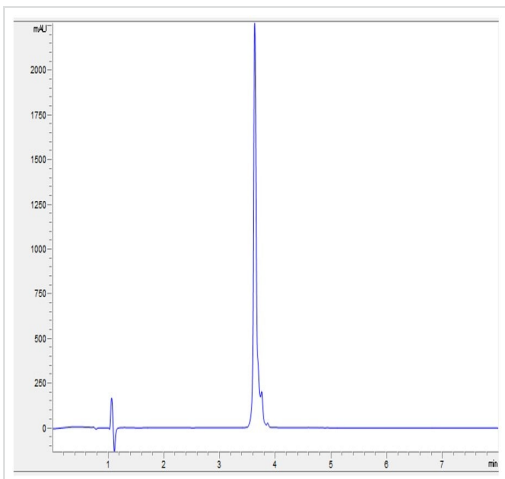


Mass Spectrometry - Recombinant Human IGF2 protein (ab283420)

Mass determination by ESI-TOF.

Predicted MW is 7532.52 (+/- 10Da by ESI-TOF). MW observed 7532.89.

HPLC analysis of ab283420.



HPLC - Recombinant Human IGF2 protein
(ab283420)

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

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