

Recombinant human IGF1 protein (Active) ab155614

[1 References](#) [3 Images](#)

Description

Product name	Recombinant human IGF1 protein (Active)
Biological activity	<p>Measured by its binding ability in a functional ELISA. Immobilized Human IGF-I R, His Tag (ab155622) at 5 µg/mL (100 µL/well) can bind Human IGF-I, Fc Tag (ab155614) with a linear range of 0.039-0.313 µg/mL.</p> <p>Measured by its binding ability in a functional ELISA. Immobilized Recombinant human IGF1 protein (Active) (ab155614) at 5 µg/mL (100 µL/well) can bind Recombinant Human IGFBP3 protein (ab155611) with a linear range of 0.031-0.5 µg/mL.</p>
Purity	<p>> 98 % SDS-PAGE.</p> <p>Lyophilized from 0.22µm filtered solution</p>
Endotoxin level	< 1.000 Eu/µg
Expression system	HEK 293 cells
Accession	<u>P05019</u>
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	GPETLCGAELVDALQFVCGDRGFYFNKPTGYGSSSSRRAP QTGM/DECCFR SCDLRRLEMYCAPLKPAKSA
Predicted molecular weight	35 kDa including tags
Amino acids	49 to 118
Tags	Fc tag N-Terminus

Specifications

Our **Abpromise guarantee** covers the use of **ab155614** in the following tested applications.

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

Applications	<p>SDS-PAGE</p> <p>Functional Studies</p> <p>ELISA</p>
Form	Lyophilized

Preparation and Storage

Stability and Storage

Shipped at 4°C. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

pH: 7.4

Constituents: 0.75% Glycine, 0.605% Tris

5-10% trehalose is commonly used for freeze drying, and after reconstitution, the trehalose is mostly about 3-5%

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 400 µg/ml.

General Info

Function

The insulin-like growth factors, isolated from plasma, are structurally and functionally related to insulin but have a much higher growth-promoting activity. May be a physiological regulator of [1-14C]-2-deoxy-D-glucose (2DG) transport and glycogen synthesis in osteoblasts. Stimulates glucose transport in rat bone-derived osteoblastic (PyMS) cells and is effective at much lower concentrations than insulin, not only regarding glycogen and DNA synthesis but also with regard to enhancing glucose uptake.

Involvement in disease

Defects in IGF1 are the cause of insulin-like growth factor I deficiency (IGF1 deficiency) [MIM:608747]. IGF1 deficiency is an autosomal recessive disorder characterized by growth retardation, sensorineural deafness and mental retardation.

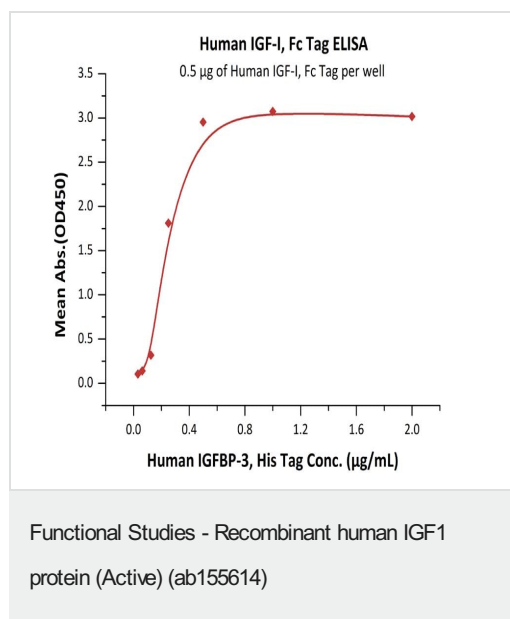
Sequence similarities

Belongs to the insulin family.

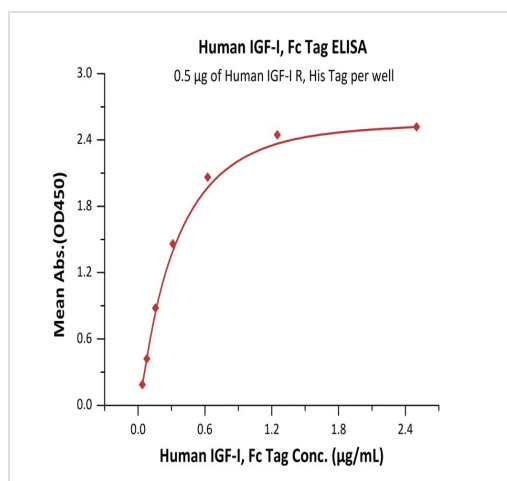
Cellular localization

Secreted.

Images

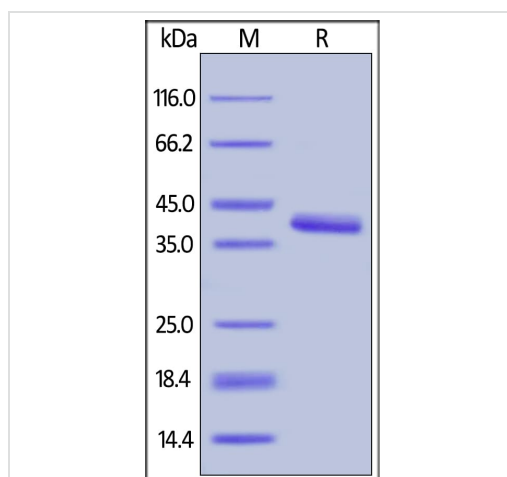


Immobilized Recombinant human IGF1 protein (Active) (ab155614) at 5 µg/mL (100 µL/well) can bind Recombinant Human IGFBP3 protein ([ab155611](#)) with a linear range of 0.031-0.5 µg/mL.



Functional Studies - Recombinant human IGF1 protein (ab155614)

Immobilized Human IGF-I R, His Tag (**ab155622**) at 5 µg/mL (100 µL/well) can bind Recombinant human IGF1 protein (Active) (ab155614) with a linear range of 0.039-0.313 µg/mL.



SDS-PAGE of reduced ab155614 stained overnight with Coomassie Blue.

SDS-PAGE - Recombinant human IGF1 protein (ab155614)

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

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