

Product datasheet

Recombinant human IGF2 protein (Active) ab256027

2 Images

Description

<b>Product name</b>	Recombinant human IGF2 protein (Active)	
<b>Biological activity</b>	FDC-P1 cell proliferation. ≤15 ng/mL; ≥ 6.7 x 10 <sup>4</sup> units/mg (typical ED <sub>50</sub> is 1-10 ng/mL).	
<b>Purity</b>	> 95 % SDS-PAGE.	
<b>Endotoxin level</b>	< 1.000 Eu/μg	
<b>Expression system</b>	Escherichia coli	
<b>Accession</b>	<a href="#">P01344-1</a>	
<b>Protein length</b>	Full length protein	
<b>Animal free</b>	No	
<b>Nature</b>	Recombinant	
<b>Species</b>	Human	
<b>Sequence</b>	AYRPSETLCGGELVDTLQFVCGDRGFYFSRPASRVSRRS RGMVECCFRS CDLALLETYCATPAKSE	
<b>Predicted molecular weight</b>	8 kDa	
<b>Amino acids</b>	25 to 91	
<b>Additional sequence information</b>	Full length mature chain without signal peptide, without propeptide.	

Specifications

Our [Abpromise guarantee](#) covers the use of **ab256027** in the following tested applications.

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

<b>Applications</b>	SDS-PAGE
	Functional Studies
<b>Form</b>	Lyophilized

Preparation and Storage

<b>Stability and Storage</b>	Shipped at room temperature. Store at -20°C.
	Constituent: 0.1% Trifluoroacetic acid

0.2 micron filtered

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

## Reconstitution

Reconstitute in sterile water at 0.1 mg/ml. Centrifuge vial before opening. Suspend the product by gently pipetting the above recommended solution down the sides of the vial. DO NOT VORTEX. Allow several minutes for complete reconstitution. For prolonged storage, dilute to working aliquots in a 0.1% BSA solution, store at -80°C and avoid repeat freeze thaws.

## 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.

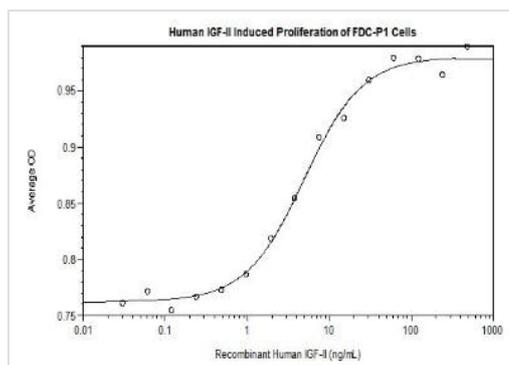
### Post-translational modifications

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

### Cellular localization

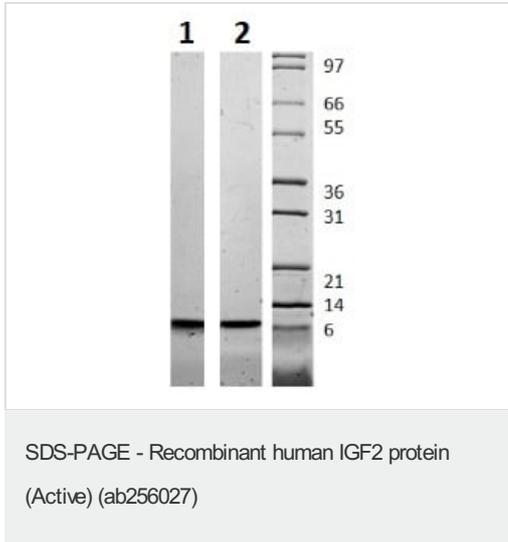
Secreted.

## Images



FDC-P1 cell proliferation.  $\leq 15$  ng/mL;  $\geq 6.7 \times 10^4$  units/mg (typical  $ED_{50}$  is 1-10 ng/mL).

Functional Studies - Recombinant human IGF2 protein (Active) (ab256027)



SDS-PAGE analysis of ab256027 (1 µg) under non-reducing (Lane 1) and reducing (Lane 2) conditions.

Human IGF2 is predicted to have a MW of 7.5kDa.  
4-20% Tris-Glycine gel. Coomassie Blue staining.

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

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