

# Recombinant mouse IGF1 protein (Active) ab9861

## 5 References

### Description

<b>Product name</b>	Recombinant mouse IGF1 protein (Active)
<b>Biological activity</b>	The <b>ED<sub>50</sub></b> , as determined a cell proliferation assay using FDC-P1 cells is $\leq 2.0$ ng/ml, corresponding to a specific activity of $\geq 5 \times 10^5$ units/mg.
<b>Purity</b>	$\geq 98$ % SDS-PAGE. $\geq 98\%$ HPLC analyses. Sterile filtered.
<b>Endotoxin level</b>	$< 1.000$ Eu/ $\mu$ g
<b>Expression system</b>	Escherichia coli
<b>Accession</b>	<b><u>P05017</u></b>
<b>Protein length</b>	Full length protein
<b>Animal free</b>	No
<b>Nature</b>	Recombinant
<b>Species</b>	Mouse
<b>Sequence</b>	GPETLCGAEL VDALQFVCGP RGFYFNKPTG YGSSIRRAPQ TGVDECCFR SCDLRRLEMY CAPLKPTKAA
<b>Predicted molecular weight</b>	8 kDa
<b>Amino acids</b>	49 to 118
<b>Additional sequence information</b>	Full length mature protein, without the signal peptide or the propeptides.

### Specifications

Our **Abpromise guarantee** covers the use of **ab9861** 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>	HPLC Functional Studies SDS-PAGE
<b>Form</b>	Lyophilized
<b>Additional notes</b>	The <b>ED<sub>50</sub></b> was determined by a cell proliferation assay using FDC-P1 cells is $< 2.0$ ng/ml, corresponding to a specific activity of $> 5 \times 10^5$ units/mg.

## Preparation and Storage

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<b>Stability and Storage</b>	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.  This product is an active protein and may elicit a biological response in vivo, handle with caution.
<b>Reconstitution</b>	Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

## General Info

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<b>Function</b>	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.
<b>Involvement in disease</b>	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.
<b>Sequence similarities</b>	Belongs to the insulin family.
<b>Cellular localization</b>	Secreted.

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

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