

## Datasheet: PHP177

<b>Description:</b>	RECOMBINANT HUMAN INSULIN-LIKE GROWTH FACTOR I
<b>Name:</b>	IGF-I
<b>Other names:</b>	INSULIN-LIKE GROWTH FACTOR I
<b>Format:</b>	Rec. Protein
<b>Product Type:</b>	Recombinant Protein
<b>Quantity:</b>	0.1 mg

## Product Details

### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Functional Assays	▪			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

<b>Target Species</b>	Human
<b>Product Form</b>	Purified recombinant protein - lyophilized
<b>Reconstitution</b>	Reconstitute with 1.0 ml distilled water. Care should be taken during reconstitution as the protein may appear as a film at the bottom of the vial. Bio-Rad recommend that the vial is gently mixed after reconstitution.
<b>Preparation</b>	Purified recombinant IGF-I expressed in <i>E.coli</i>
<b>Source</b>	E.coli
<b>Preservative Stabilisers</b>	None present
<b>Carrier Free</b>	Yes
<b>Endotoxin Level</b>	< 1.0 EU/ug
<b>Approx. Protein</b>	0.1 mg/ml

## Concentrations

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### External Database Links

**UniProt:**

[P05019](#)   [Related reagents](#)

**Entrez Gene:**

[3479](#)   IGF1   [Related reagents](#)

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**Synonyms**

IBP1

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**Product Information**

IGF-I (Insulin-like Growth Factor I), is a secreted mitogenic polypeptide and member of the insulin gene family, produced primarily by the liver, which effects a wide range of cells and plays a key role in cell proliferation and growth, inhibition of apoptosis, and is linked with tumour cell growth.

IGF-I signals through binding to the type 1 insulin-like growth factor receptor (IGF-1R) and also to the insulin receptor (IR), resulting in the activation of the AKT signalling pathway. IGF-I production is stimulated by growth hormone (GH). and can be hindered by GH insensitivity, deficiency in GH receptors or a malfunction in the post GH receptor signalling pathway.

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**Protein Molecular Weight**

7.6 kDa

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**Activity**

The ED<sub>50</sub> was determined by a cell proliferation assay using FDC-P1 cells is < 2.0 ng/ml, corresponding to a specific activity of > 5 x 10<sup>5</sup> units/mg.

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**Purity**

>98% by SDS PAGE/HPLC

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**References**

1. Zhang X *et al.* (2015) Wnt signaling regulates the stemness of lung cancer stem cells and its inhibitors exert anticancer effect on lung cancer SPC-A1 cells. [Med Oncol. 32 \(4\): 462.](#)

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**Storage**

Prior to reconstitution store at -20°C.

After reconstitution store at -20°C.

Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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**Guarantee**

Guaranteed for 3 months from the date of reconstitution or until the date of expiry, whichever comes first. Please see label for expiry date.

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**Health And Safety Information**

Material Safety Datasheet documentation #10268 available at: <https://www.bio-rad-antibodies.com/SDS/PHP177>  
10268

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**Regulatory**

For research purposes only

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batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://bio-rad-antibodies.com/datasheets)

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