

## 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 - lyophilised
<b>Reconstitution</b>	Reconstitute with 1.0ml 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>Preservative Stabilisers</b>	None present
<b>Endotoxin Level</b>	<1EU/ug
<b>Approx. Protein Concentrations</b>	0.1mg/ml
<b>External Database Links</b>	<b>UniProt:</b> <a href="#">P05019</a> <a href="#">Related reagents</a>  <b>Entrez Gene:</b> <a href="#">3479</a> IGF1 <a href="#">Related reagents</a>
<b>Synonyms</b>	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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**Molecular Weight** 7.6kD

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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 analysis.

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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 +4°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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**Shelf Life** 3 months from date of reconstitution.

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**Health And Safety Information** Material Safety Datasheet documentation #10268 available at: 10268: <https://www.bio-rad-antibodies.com/uploads/MSDS/10268.pdf>

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**Regulatory** For research purposes only

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