

## Datasheet: PHP105

**BATCH NUMBER 161536**

<b>Description:</b>	RECOMBINANT HUMAN FGF BASIC
<b>Name:</b>	FGF BASIC
<b>Other names:</b>	FGF2
<b>Format:</b>	Rec. Protein
<b>Product Type:</b>	Recombinant Protein
<b>Quantity:</b>	50 µg

### 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
ELISA	▪			0.2 - 0.4 ng/well
Western Blotting	▪			1.5 - 3.0 ng/lane
Functional Assays	▪			0.1 - 10 ng/ml

Where this protein 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 protein for use in their own system using appropriate negative/positive controls.

<b>Target Species</b>	Human
<b>Product Form</b>	Purified recombinant protein expressed in <i>E. coli</i> - lyophilized
<b>Reconstitution</b>	Reconstitute with 0.5 ml Tris (5mM, pH7.6). 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. Further dilutions may be prepared in a buffer containing a carrier protein (eg 0.1% BSA).
<b>Buffer Solution</b>	TRIS buffered saline.
<b>Preservative Stabilisers</b>	None present
<b>Carrier Free</b>	Yes
<b>Endotoxin Level</b>	< 0.1 ng/ug

<b>Approx. Protein Concentrations</b>	Total protein concentration 0.1 mg/ml after reconstitution.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P09038</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">2247</a>    FGF2    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	FGFB
<b>Product Information</b>	<p><b>Recombinant Human FGF basic</b> represents the C-terminal portion of human fibroblast growth factor 2 (A<sup>135</sup> - S<sup>288</sup>).</p> <p>Fibroblast growth factor basic (FGF basic), also known as FGF 2, is a heparin binding growth factor which has stimulatory activity on a range of cells of mesenchymal, neuroectodermal and endothelial origin.  Note: FGF basic is sensitive to acidic conditions.</p>
<b>Protein Molecular Weight</b>	17.2 kD (154 amino acid sequence)
<b>Activity</b>	2 x 10 <sup>6</sup> units/mg
<b>Purity</b>	>95% by SDS PAGE and HPLC analysis
<b>ELISA</b>	This product may be used as a standard for ELISA applications with either <a href="#">AHP1038</a> or <a href="#">AHP1038B</a> .
<b>Western Blotting</b>	This product may be used as the positive control for Western Blot applications with either <a href="#">AHP1038</a> or <a href="#">AHP1038B</a> .
<b>References</b>	<ol style="list-style-type: none"> <li>1. Svendsen, C.N. <i>et al.</i> (1997) Long-term survival of human central nervous system progenitor cells transplanted into a rat model of Parkinson's disease. <a href="#">Exp Neurol. 148: 135-46.</a></li> <li>2. Kim, T.H. <i>et al.</i> (2005) Recombinant human prothrombin kringle-2 induces bovine capillary endothelial cell cycle arrest at G0-G1 phase through inhibition of cyclin D1/CDK4 complex: modulation of reactive oxygen species generation and up-regulation of cyclin-dependent kinase inhibitors. <a href="#">Angiogenesis. 8: 307-14.</a></li> <li>3. van Beuningen, HM <i>et al.</i> (2014) Inhibition of TAK1 and/or JAK can rescue impaired chondrogenic differentiation of human mesenchymal stem cells in osteoarthritis-like conditions. <a href="#">Tissue Eng Part A. 20 (15-16): 2243-52.</a></li> <li>4. Pleumeekers, M.M. <i>et al.</i> (2014) The <i>in vitro</i> and <i>in vivo</i> capacity of culture-expanded human cells from several sources encapsulated in alginate to form cartilage. <a href="#">Eur Cell Mater. 27: 264-80.</a></li> <li>5. Willems, N. <i>et al.</i> (2015) Intradiscal application of rhBMP-7 does not induce regeneration in a canine model of spontaneous intervertebral disc degeneration. <a href="#">Arthritis</a></li> </ol>

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**Storage**

Prior to reconstitution store at -20°C. Following reconstitution store at -20°C.

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the protein. 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 #10308 available at: <https://www.bio-rad-antibodies.com/SDS/PHP10510308>

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**Regulatory**

For research purposes only

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**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto:antibody_sales_us@bio-rad.com)

**Worldwide**

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: [antibody\\_sales\\_uk@bio-rad.com](mailto:antibody_sales_uk@bio-rad.com)

**Europe**

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: [antibody\\_sales\\_de@bio-rad.com](mailto:antibody_sales_de@bio-rad.com)

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