Datasheet: PHP105

Description:	RECOMBINANT HUMAN FGF BASIC
Name:	FGF BASIC
Other names:	FGF2
Format:	Rec. Protein
Product Type:	Recombinant Protein
Quantity:	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.

	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.

Target Species

Human

Product Form

Purified recombinant protein expressed in *E. coli* - lyophilized

Reconstitution

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).

Source

E.coli

Buffer Solution

TRIS buffered saline.

Preservative Stabilisers

None present

Carrier Free

Yes

Endotoxin Level	< 0.1 ng/ug
Approx. Protein Concentrations	Total protein concentration 0.1 mg/ml after reconstitution.
External Database Links	**UniProt:** P09038 Related reagents **Entrez Gene:** 2247 FGF2 Related reagents
Synonyms	FGFB
Product Information	**Recombinant Human FGF basic** represents the C-terminal protion of human fibroblast growth factor 2 (A^{135} - S^{288}). 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.
Protein Molecular Weight	17.2 kD (154 amino acid sequence)
Activity	Determined by a cell proliferation assay using Balb/c 3T3 cells. The expected ED_{50} is ≤ 0.1 ng/ml, corresponding to a specific activity of ≥ 1 x 10^7 units/mg.
Purity	>95% by SDS PAGE and HPLC analysis
ELISA	This product may be used as a standard for ELISA applications with either AHP1038 or AHP1038B.
Western Blotting	This product may be used as the positive control for Wester Blot applications with either AHP1038 or AHP1038B.
References	1. Svendsen, C.N. *et al.* (1997) Long-term survival of human central nervous system progenitor cells transplanted into a rat model of Parkinson's disease. Exp Neurol. 148: 135-46. 2. Dimitrellos, V. *et al.* (2003) Capillary electrophoresis and enzyme solid phase assay for examining the purity of a synthetic heparin proteoglycan-like conjugate and identifying binding to basic fibroblast growth factor. Biomed Chromatogr. 17 (1): 42-7. 3. Kim, T.H. *et al.* (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. Angiogenesis. 8: 307-14. 4. van Beuningen, HM *et al.* (2014) Inhibition of TAK1 and/or JAK can rescue impaired chondrogenic differentiation of human mesenchymal stem cells in osteoarthritis-like conditions. Tissue Eng Part A. 20 (15-16): 2243-52.

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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.
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.
Health And Safety Information	Material Safety Datasheet documentation #10308 available at: https://www.bio-rad-antibodies.com/SDS/PHP105 10308
Regulatory	For research purposes only

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