OriGene Technologies Inc.

9620 Medical Center Drive, Ste 200
Rockville, MD 20850
UNITED STATES
Phone: +1-888-267-4436
Fax: +1-301-340-8606
techsupport@origene.com

OriGene EU

Acris Antibodies GmbH
Schillerstr. 5
32052 Herford
GERMANY
Phone: +49-5221-34606-0
Fax: +49-5221-34606-11
info@acris-antibodies.com

Human FGF basic / FGF2 (recombinant) - Purified

Alternate names: BFGF, FGFB, Fibroblast growth factor 2 (basic), HBGF-2, HBGF2, Heparin-binding growth factor 2

Catalog No.: AR09356PU-N

Quantity: 50 µg

Background: FGF basic (FGF2) is a member of the fibroblast growth factor (FGF) family. FGF family members bind heparin and possess broad mitogenic and angiogenic activities. FGF2 is involved in diverse biological processes, such as limb and nervous system development, wound healing, and tumor growth. FGF2 mRNA contains multiple polyadenylation sites, and is alternatively translated from AUG and non-AUG (CUG) initiation codons resulting in five different isoforms with distinct properties. The CUG-initiated isoforms are localized in the nucleus and are responsible for the intracrine effect, whereas, the AUG-initiated form is mostly cytosolic and is responsible for the paracrine and autocrine effects of this FGF.

Uniprot ID: P09038

NCBI: NP_001997

GeneID: 2247

Species: Human

Source: E. coli

Format:
State: Lyophilised purified protein
Purity: >95% Heparin affinity chromatography
Buffer System: 100 µl (10 µg; 50 µg) or 1 ml (1 mg) phosphate buffered saline (pH 6), supplemented with 5 mM glutathion
Reconstitution: Reconstitute in 100 µl (10 µg; 50 µg) or 1 ml (1 mg) dist. H2O, dilute further in PBS as required.

Applications: Characterized growth factor additive in cell culture media for mesoderm and neuroectoderm-derived cells.
Biological Test System
- Cell proliferation assay with BAE cells
- Rabbit cornea in vivo assay
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Description: Recombinant human basic Fibroblast Growth Factor (hbFGF).
Biological Activity: < 1 ng/ml for half maximum stimulation of cell proliferation with bovine aortic endothelial cells (BAE cells).
Molecular weight: 18

Storage:

Prior to reconstitution store at 2-8°C.
Following reconstitution store the antibody at -20°C.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

General Readings:

1. Abraham JA, Whang JL, Tumolo A, Mergia A, Friedman J, Gospodarowicz D, et al. Human basic fibroblast growth factor: nucleotide sequence and genomic organization. EMBO J. 1986 Oct;5(10):2523-8. PubMed PMID: 3780670.
2. Gospodarowicz D, Neufeld G, Schweigerer L. Molecular and biological characterization of fibroblast growth factor, an angiogenic factor which also controls the proliferation and differentiation of mesoderm and neuroectoderm derived cells. Cell Differ. 1986 Jul;19(1):1-17. PubMed PMID: 2425984.
3. Lobb R, Sasse J, Sullivan R, Shing Y, D'Amore P, Jacobs J, et al. Purification and characterization of heparin-binding endothelial cell growth factors. J Biol Chem. 1986 Feb 5;261(4):1924-8. PubMed PMID: 3003088.
4. Iwane M, Kurokawa T, Sasada R, Seno M, Nakagawa S, Igarashi K. Expression of cDNA encoding human basic fibroblast growth factor in E. coli. Biochem Biophys Res Commun. 1987 Jul 31;146(2):470-7. PubMed PMID: 3304281.
5. Knoerzer W, Binder HP, Schneider K, Gruss P, McCarthy JE, Risau W. Expression of synthetic genes encoding bovine and human basic fibroblast growth factors (bFGFs) in Escherichia coli. Gene. 1989 Jan 30;75(1):21-30. PubMed PMID: 2470650.
6. Boehnke K, Mirancea N, Pavesio A, Fusenig NE, Boukamp P, Stark HJ. Effects of fibroblasts and microenvironment on epidermal regeneration and tissue function in long-term skin equivalents. Eur J Cell Biol. 2007 Dec;86(11-12):731-46. Epub 2007 Feb 9. PubMed PMID: 17292509.