

DP3506S

Polyclonal Antibody to FGF basic / FGF2 - Azide Free

Alternate names:

BGFB, FGFB, Fibroblast growth factor 2 (basic), HBGF-2, HBGF2, Heparin-binding growth factor 2

Quantity:

0.1 mg

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_001997.5](#)

GeneID:

[2247](#)

Host:

Rabbit

Immunogen:

Highly pure (> 98%) recombinant Human FGF-2 (basic) [Ala136 – Ser288] produced in E.coli (Cat. -No DA3503XC).

Format:

State: Lyophilized purified IgG fraction

Purification: Affinity Chromatography on Protein A

Buffer System: PBS, pH 7.4 without stabilizer or preservative

Reconstitution: Restore in sterile water to a concentration of 0.1-1.0 mg/ml

Applications:

Neutralization: To yield one-half maximal inhibition (ND50) of the biological activity of human FGF-2 basic

(5 ng/ml) on HUVEC cells, a concentration of about 3.5 µg/ml of this antibody is required.

Western Blot: 2-5 µg/ml.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity:

The antibody will detect Human FGF-2 (basic).

Storage:

Store lyophilized at 2-8°C for 6 months or at -20°C long term.

After reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C long term.

Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

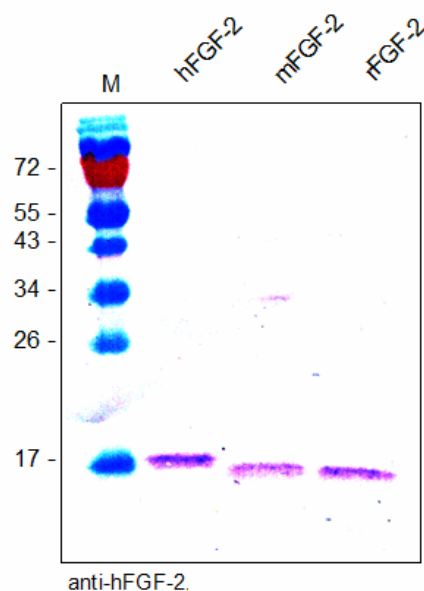
General Readings:

1. Coulier F, Pontarotti P, Roubin R, Hartung H, Goldfarb M, Birnbaum D. Of worms and men: an evolutionary perspective on the fibroblast growth factor (FGF) and FGF receptor families. J Mol Evol. 1997 Jan;44(1):43-56. PubMed PMID: 9010135.
2. Fernig DG, Gallagher JT. Fibroblast growth factors and their receptors: an

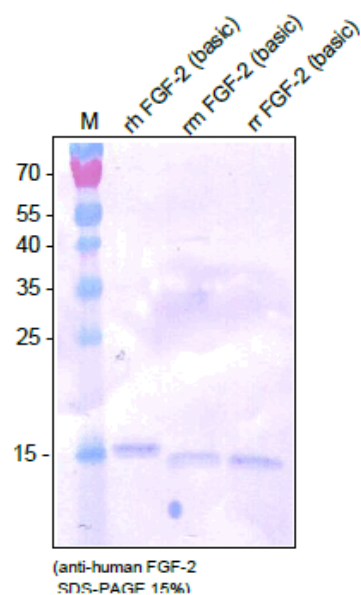
- information network controlling tissue growth, morphogenesis and repair. *Prog Growth Factor Res.* 1994;5(4):353-77. PubMed PMID: 7780086.
3. Presta M, Dell'Era P, Mitola S, Moroni E, Ronca R, Rusnati M. Fibroblast growth factor/fibroblast growth factor receptor system in angiogenesis. *Cytokine Growth Factor Rev.* 2005 Apr;16(2):159-78. Epub 2005 Feb 2. PubMed PMID: 15863032.
 4. Claus P, Doring F, Gringel S, Muller-Ostermeyer F, Fuhlrott J, Kraft T, et al. Differential intranuclear localization of fibroblast growth factor-2 isoforms and specific interaction with the survival of motoneuron protein. *J Biol Chem.* 2003 Jan 3;278(1):479-85. Epub 2002 Oct 22. PubMed PMID: 12397076.
 5. Quarto N, Fong KD, Longaker MT. Gene profiling of cells expressing different FGF-2 forms. *Gene.* 2005 Aug 15;356:49-68. PubMed PMID: 16023796.
 6. Tsuneto M, Yamazaki H, Yoshino M, Yamada T, Hayashi S. Ascorbic acid promotes osteoclastogenesis from embryonic stem cells. *Biochem Biophys Res Commun.* 2005 Oct 7;335(4):1239-46. PubMed PMID: 16112648.
 7. Hébert JM, Basilico C, Goldfarb M, Haub O, Martin GR. Isolation of cDNAs encoding four mouse FGF family members and characterization of their expression patterns during embryogenesis. *Dev Biol.* 1990 Apr;138(2):454-63. PubMed PMID: 2318343.

Pictures:

Test of cross-reactivity of anti-Human FGF-2 polyclonal antibody by Western blot analysis. Recombinant human, mouse and Rat FGF-2 produced in *E. coli* were loaded under reducing conditions in 15% SDS-polyacrylamide gel. Anti-human FGF-2 recognizes also the mouse and the rat form.



Western analysis of recombinant human (DA3503XC), mouse (AR31056PU-L) and rat (AR31055PU-L) FGF-2 (basic) using a polyclonal antibody directed against recombinant human FGF-2. As expected the antibody cross reacts with the mouse and rat proteins.



FGF-2 Sandwich-ELISA using a polyclonal Goat anti-human FGF-2 as capture antibody and recombinant human FGF-2 (Cat.-No DA3503X) as standard. The polyclonal rabbit anti-human FGF-2 antibody (Cat.-No DP3506) in combination with a goat anti-rabbit-Biotin was used for detection.

