

Rabbit Anti-FGF2 antibody

SL0217R

Product Name FGF2

Chinese Name 碱性成纤维细胞生长因子/FGF2 抗体

Alias Basic fibroblast growth factor; FGF basic; FGF-basic; BFGF; FGF-2; FGF B; FGF2 basic; FGFB; Fibroblast growth factor 2 (basic); HBGF 2; HBGF-2; HBGF2; HBGH 2; HBGH2; Heparin binding growth factor 2 precursor; Prostatropin; FGF2_HUMAN.

Research Area Tumour Cardiovascular Cell biology immunology Growth factors and hormones cell factor

Immunogen Species Rabbit

Clonality Polyclonal

React Species Human(predicted:Mouse,Rat,Chicken,Cow,Rabbit,Sheep)

Applications WB=1:500-2000,Flow-Cyt=1 μ g/Test (Paraffin sections need antigen repair)
not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

Theoretical molecular weight 18kDa

Cellular localization The nucleus Secretory protein

Form Liquid

Concentration 1mg/ml

immunogen KLH conjugated synthetic peptide derived from human bFGF: 143-250/288

Lsotype IgG

Purification affinity purified by Protein A

Buffer Solution Human(predicted:Mouse,Rat,Chicken,Cow,Rabbit,Sheep)1M TBS(pH7.4) with 1% BSA, Human(predicted:Mouse,Rat,Chicken,Cow,Rabbit,Sheep)3% Proclin300 and 50% Glycerol.

Storage Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

Attention This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

PubMed [PubMed](#)

The protein encoded by this gene is a member of the fibroblast growth factor (FGF) family. FGF family members bind heparin and possess broad mitogenic and angiogenic activities. This protein has been implicated in diverse biological processes, such as limb and nervous system development, wound healing, and tumor growth. The mRNA for this gene contains multiple polyadenylation sites, and is alternatively translated from non-AUG (CUG) and AUG 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. [provided by RefSeq, Jul 2008].

Function:

Plays an important role in the regulation of cell survival, cell division, angiogenesis, cell differentiation and cell migration. Functions as potent mitogen in vitro.

Subunit:

Monomer. Homodimer. Interacts with FGFR1, FGFR2, FGFR3 and FGFR4. Affinity between fibroblast growth factors (FGFs) and their receptors is increased by heparan sulfate glycosaminoglycans that function as coreceptors. Interacts with CSPG4, FGFBP1 and TEC. Found in a complex with FGFBP1, FGF1 and FGF2.

Subcellular Location:

Secreted. Nucleus. Note=Exported from cells by an endoplasmic reticulum (ER)/Golgi-independent mechanism. Unconventional secretion of FGF2 occurs by direct translocation across the plasma membrane. Binding of exogenous FGF2 to FGFR facilitates endocytosis followed by translocation of FGF2 across endosomal membrane into the cytosol. Nuclear import from the cytosol requires the classical nuclear import machinery, involving proteins KPNA1 and KPNB1, as well as CEP57.

Tissue Specificity:

Expressed in granulosa and cumulus cells. Expressed in hepatocellular carcinoma cells, but not in non-cancerous liver tissue.

Post-translational modifications:

Phosphorylation at Tyr-215 regulates FGF2 unconventional secretion. Several N-termini starting at positions 94, 125, 126, 132, 143 and 162 have been identified by direct sequencing.

Similarity:

Belongs to the heparin-binding growth factors family.

SWISS:

P09038

Gene ID:

**Product
Detail**

2247

Database links:

[Entrez Gene: 2247](#) Human

[Entrez Gene: 14173](#) Mouse

[Entrez Gene: 54250](#) Rat

[Omim: 134920](#) Human

[SwissProt: P09038](#) Human

[SwissProt: P15655](#) Mouse

[SwissProt: P13109](#) Rat

[Unigene: 284244](#) Human

[Unigene: 473689](#) Mouse

[Unigene: 31808](#) Rat

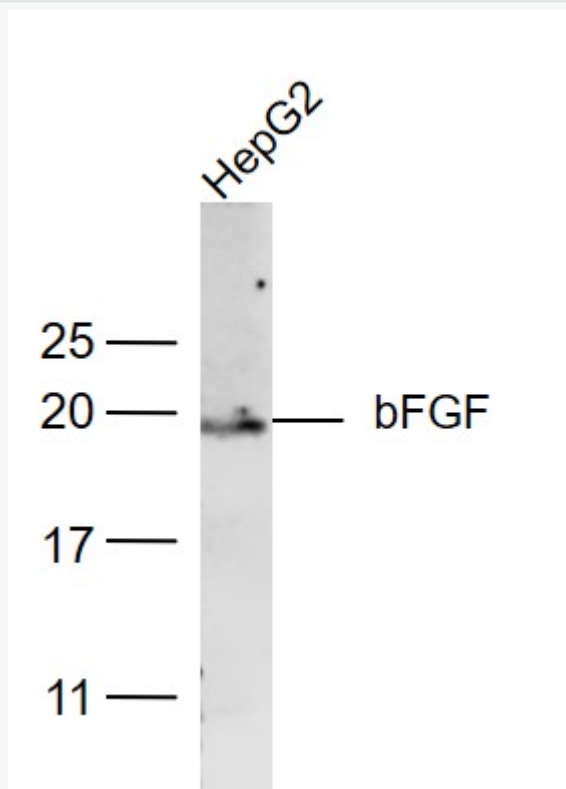
Growth factors and hormones (Growth Factor and Hormones)

(b-FGF)主要分布于垂体、脑和神经组织及视网膜、肾上腺、胎盘等，尤以垂体含量最高。

FGF2(basic fibroblast growth factor)碱性成纤维细胞生长因子是由 endothelial cells 及平滑肌细胞合成并对合成细胞有促分裂效应的多肽分子,具有强烈的血管生成作用,参与血管生成、组织修复、神经系统的发育等。FGF2 在体外,能刺激细胞增殖,细胞迁移,诱导纤溶酶原激活物及胶原酶活性。是能与肝素结合的促分裂剂。

FGF 家族参与一系列重要的生理功能: 胚胎发育、细胞生长、组织的修复、器官的形成、Tumour 的浸润和生长等。

**Product
Picture**



Sample:

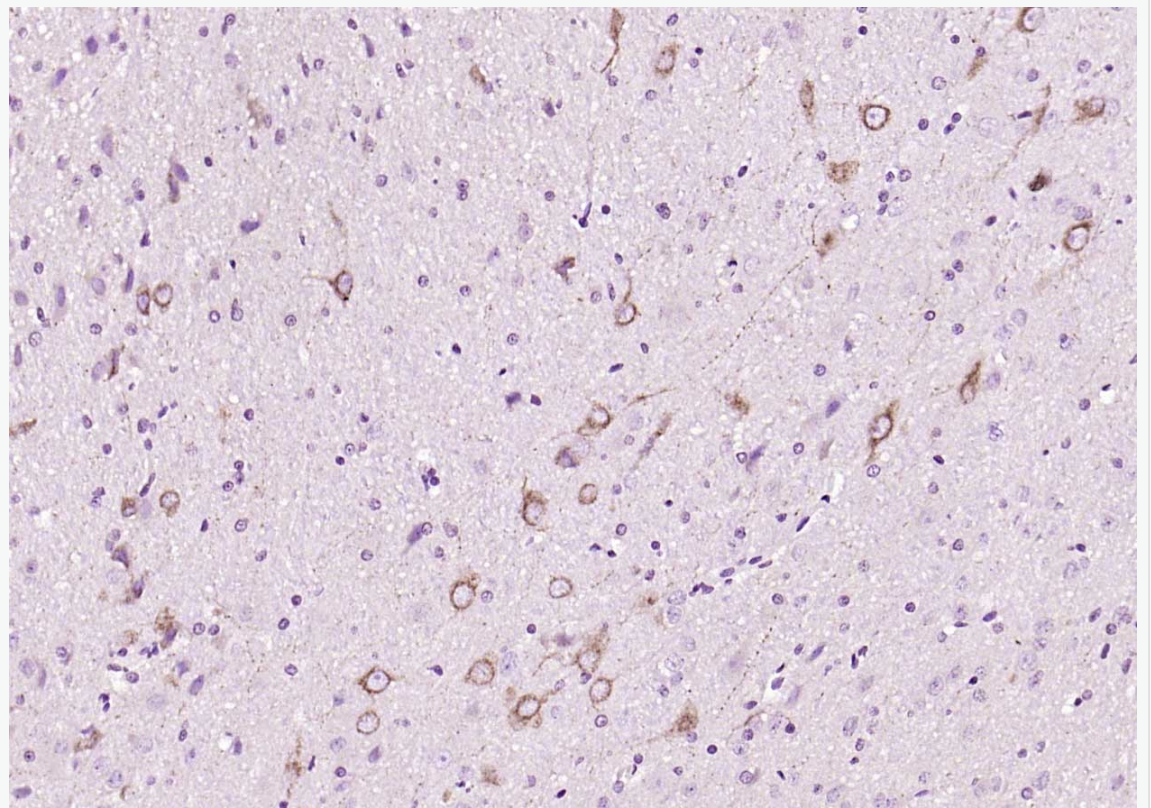
HepG2(Human) Cell Lysate at 30 ug

Primary: Anti-bFGF (SL0217R) at 1/500 dilution

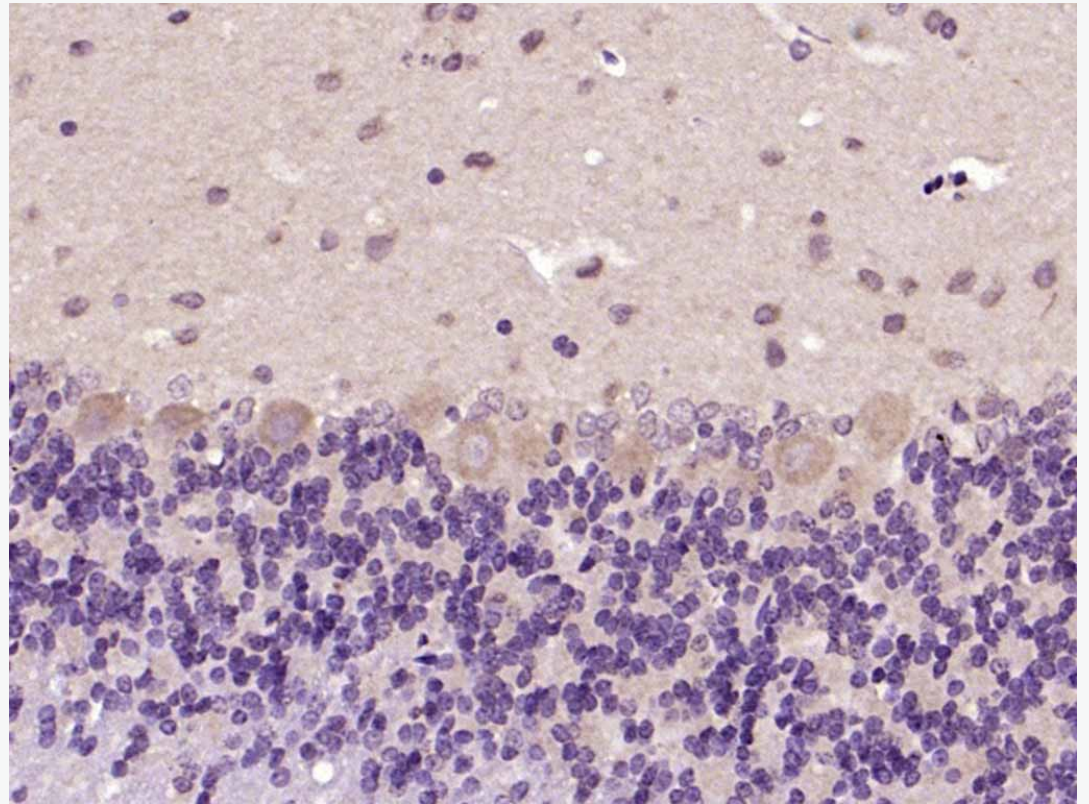
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 18 kD

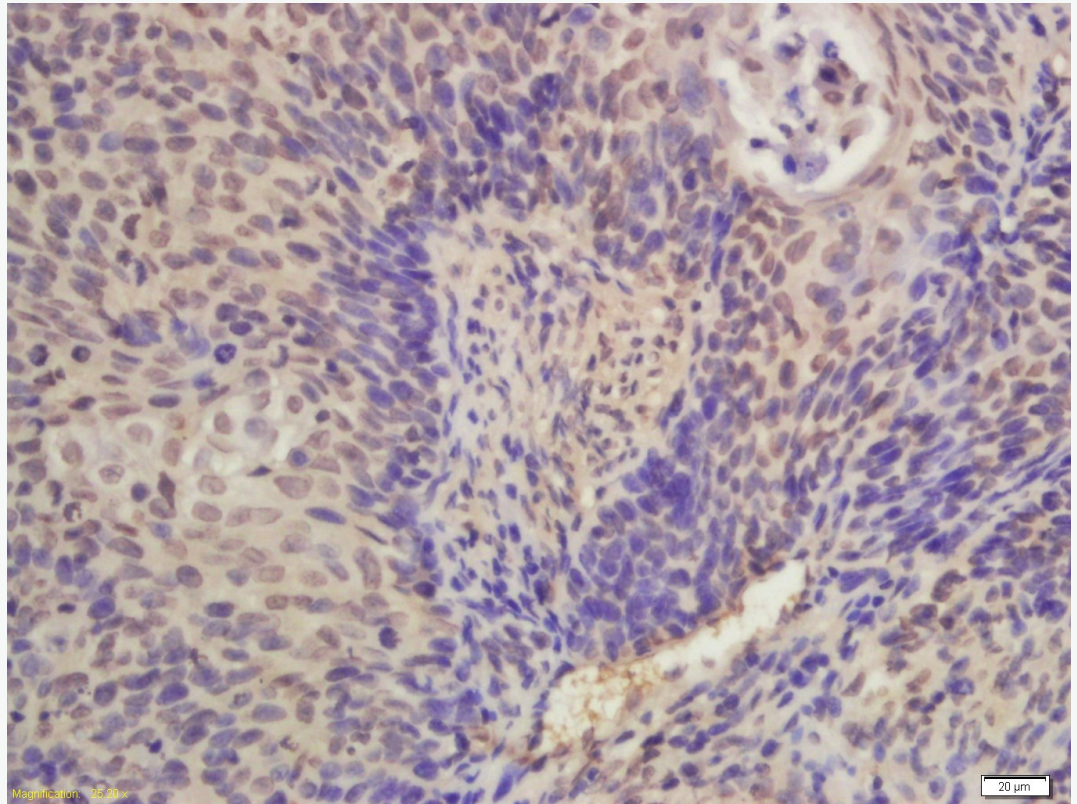
Observed band size: 18 kD



Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (bFGF) Polyclonal Antibody, Unconjugated (SL0217R) at 1:2000 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (mouse cerebellum); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (bFGF) Polyclonal Antibody, Unconjugated (SL0217R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

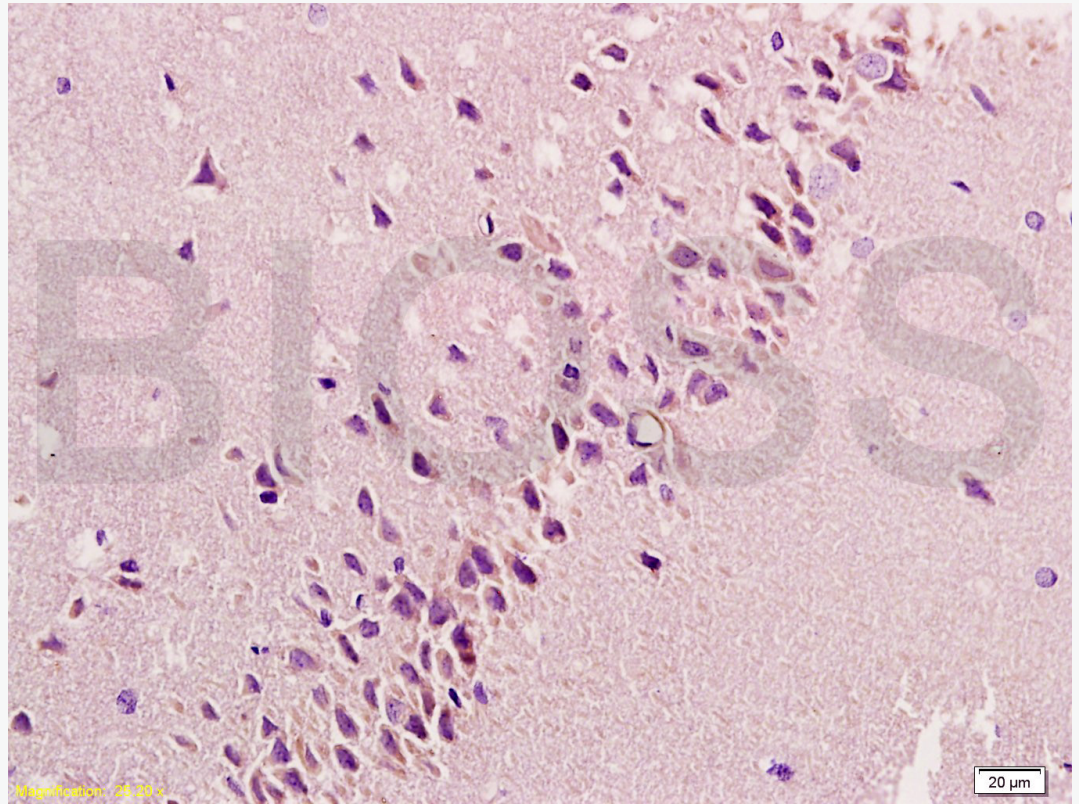


Tissue/cell: human cervical cancer tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

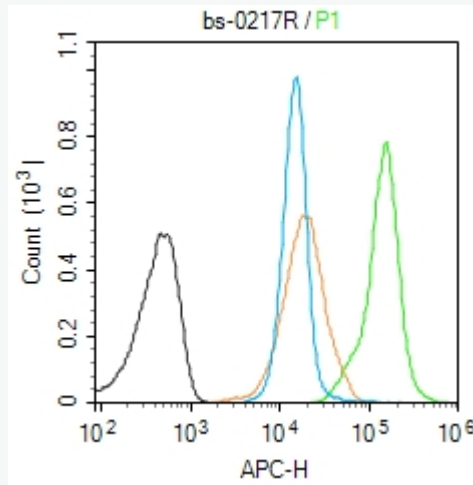
Antigen retrieval: citrate buffer

(Human(predicted:Mouse,Rat,Chicken,Cow,Rabbit,Sheep)1M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-bFGF Polyclonal Antibody, Unconjugated(SL0217R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer
(Human(predicted:Mouse,Rat,Chicken,Cow,Rabbit,Sheep)1M, pH 6.0), Boiling
bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min;
Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;
Incubation: Anti-bFGF Polyclonal Antibody, Unconjugated(SL0217R) 1:200,
overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and
DAB(C-0010) staining



Blank control (Black line): Molt4 (Black).

Primary Antibody (green line): Rabbit Anti-bFGF antibody (SL0217R)

Dilution: 1 μ g /10⁶ cells;

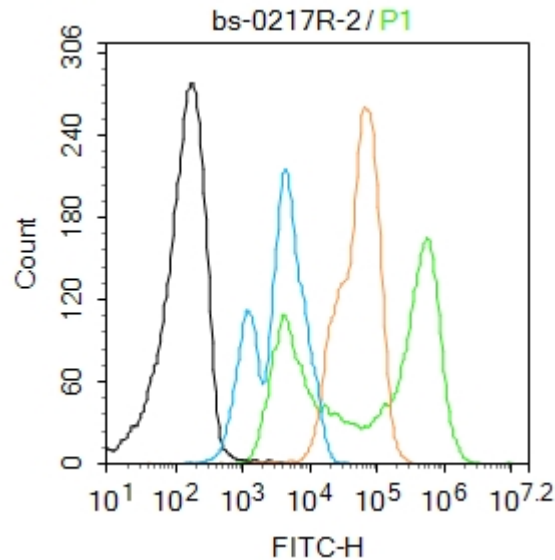
Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody (white blue line): Goat anti-rabbit IgG-AF647

Dilution: 1 μ g /test.

Protocol

The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at room temperature. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.



Blank control:HepG2.

Primary Antibody (green line): Rabbit Anti-bFGF antibody (SL0217R)

Dilution: 2 μ g /10⁶ cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody : Goat anti-rabbit IgG-AF488

Dilution: 1 μ g /test.

Protocol

The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at-20°C.The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.



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