Anti-Basic FGF /FGF-2 antibody, mouse monoclonal (bFM-2), neutralizing

Product code	71-513
Size	100 µg
Storage	-20℃
Concentration	1.0 mg/ml
Buffer	PBS- with 50% glycerol
Purity	Purified IgG fraction with protein A from hybridoma cell culture medium
Immunogen	bovine brain basic FGF
Isotype	mouse IgG1κ
Reactivity	bovine, rat, mouse and human basic FGF. Dose not react with bovine acidic FGF.
Special notes	
Application	1. Western blotting: (1µg/ml) 2. Immunofluorescence staining: (1µg/ml) 3. Biological neutralization of FGF-2: 0.3 µg antibody/ml effects 50% inhibition of the stimulatory activity of 1 ng bovine basic FGF in cultures of bovine capillary endothelial cells. (Ref.1) Recommended using 71-511 anti-bFGF antibody (bFM-1) 4. Radioimmunoassay: using this antibody at 1µg/ml, a standard curve for basic FGF over the range 2 to 50 ng/ml is generated. (Ref.1) Recommended using 71-511 anti-bFGF antibody (bFM-1)
Background	Basic FGF (bFGF / FGF-2) plays an important role in the regulation of cell survival, cell division, cell differentiation and cell migration. **Molecular mass:** 17.3 kDa. Five isoforms of FGF2 were recognized. The AUG-initiated 18 kDa low molecular weight (LMW) isoform is cytosolic and can be secreted by direct translocation across the plasma membrane. The four high molecular weight (HMW) FGF2 (22 kDa, 22.5 kDa, 24 kDa, and 34 kDa), produced by utilizing the CUG codons and expressed as N-terminal elongations of the LMW isoform, is commonly thought to localize to the nucleus.
Data Link	UniProtKB P03969 (FGF2_BOVIN)

Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES. NOT FOR MILITARY USE.

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Data Images: 71-513 Anti-Basic FGF (FGF-2) antibody, mouse monoclonal (bFM-2) , neutralizing

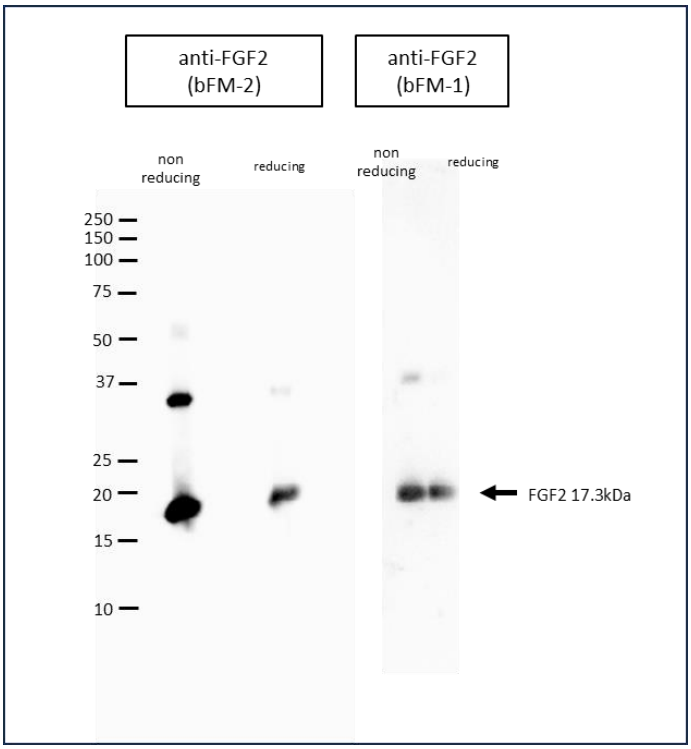

Fig.1 Western Blot of FGF-2

Applied sample; 1. 0.1µg of recombinant FGF-2

Primary antibody; 1µg/ml of anti-FGF-2 antibody

Recommended using 71-513 anti-basic FGF antibody (bFM-2)

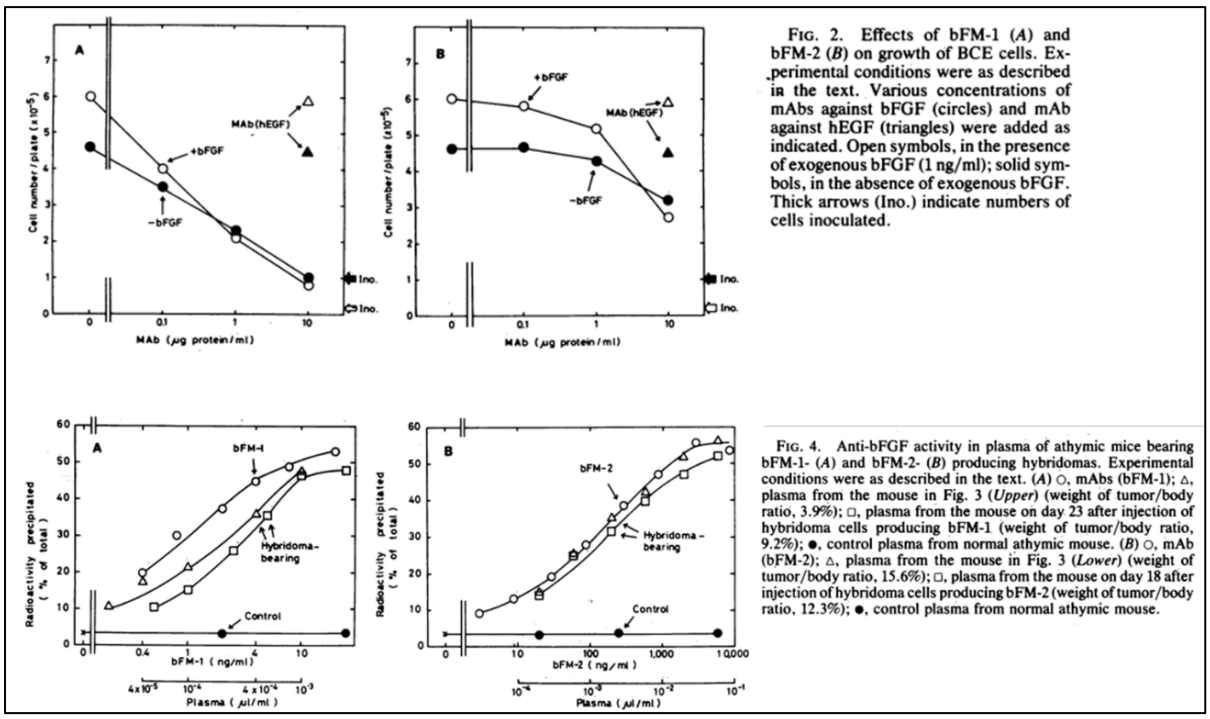

FIG. 2. Effects of bFM-1 (*A*) and bFM-2 (*B*) on growth of BCE cells. Experimental conditions were as described in the text. Various concentrations of mAbs against bFGF (circles) and mAb against hEGF (triangles) were added as indicated. Open symbols, in the presence of exogenous bFGF (1 ng/ml); solid symbols, in the absence of exogenous bFGF. Thick arrows (Ino.) indicate numbers of cells inoculated.

FIG. 4. Anti-bFGF activity in plasma of athymic mice bearing bFM-1- (*A*) and bFM-2- (*B*) producing hybridomas. Experimental conditions were as described in the text. (*A*) ○, mAbs (bFM-1); △, plasma from the mouse in Fig. 3 (*Upper*) (weight of tumor/body ratio, 3.9%); □, plasma from the mouse on day 23 after injection of hybridoma cells producing bFM-1 (weight of tumor/body ratio, 9.2%); ●, control plasma from normal athymic mouse. (*B*) ○, mAb (bFM-2); △, plasma from the mouse in Fig. 3 (*Lower*) (weight of tumor/body ratio, 15.6%); □, plasma from the mouse on day 18 after injection of hybridoma cells producing bFM-2 (weight of tumor/body ratio, 12.3%); ●, control plasma from normal athymic mouse.

Fig2. Neutralizing antibody for growth of BCE cell and tumor angiogenesis (Ref.1)

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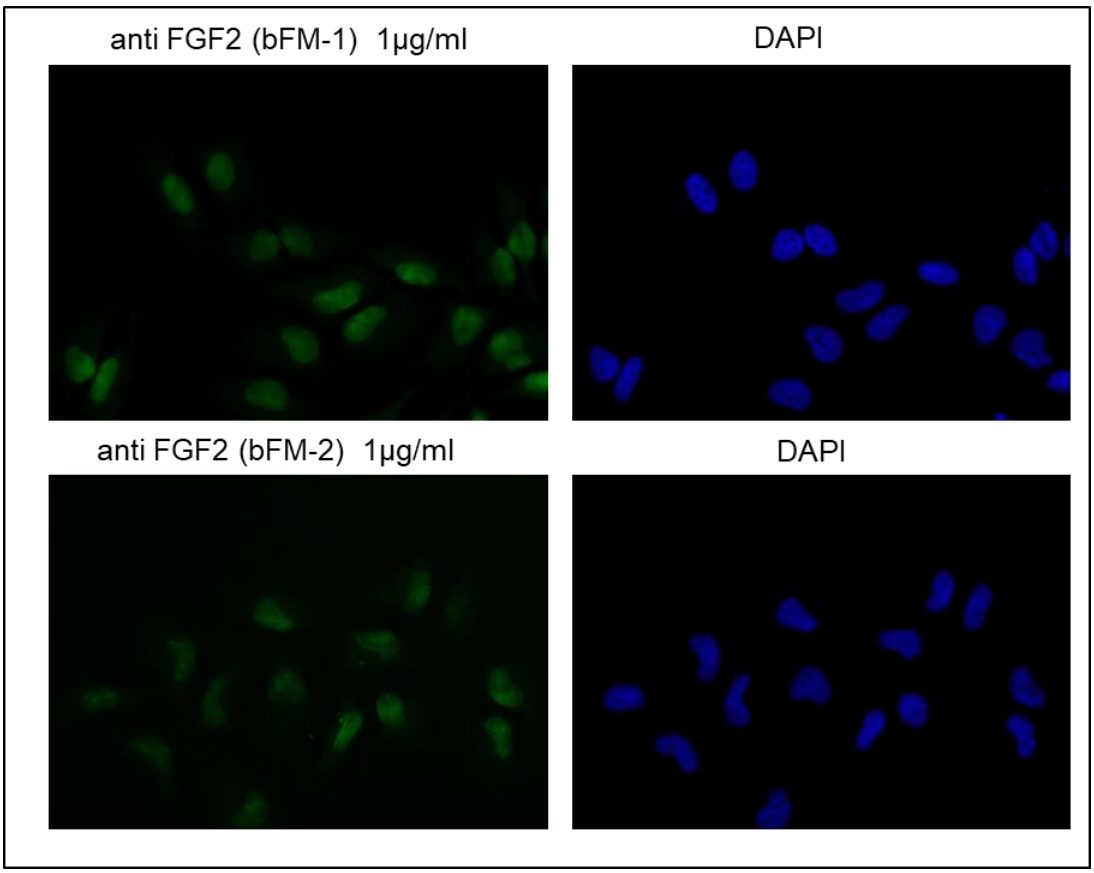

Fig.3 IF of FGF-2

HeLa cells are fixed with 4% PFA, permeabilized with 0.25 % Triton X-100.

Anti-FGF-2 antibody was used at 1µg/ml and as the secondary antibody, goat anti-rabbit IgG antibody (Alexa Fluor 488 conjugated) was used at 1/1,000 dilution.

Left: FGF-2 in green with Alex Fluor 488

Right: Nuclear DNA was labelled in blue with DAPI.

Related product:

71-511 Anti-Basic FGF (FGF-2) antibody, mouse monoclonal (bFM-1), neutralizing

Reference: This product has been used in the following publication.

1. Matsuzaki K, *et al.* Monoclonal antibodies against heparin-binding growth factor II/basic fibroblast growth factor that block its biological activity: invalidity of the antibodies for tumor angiogenesis. Proc.Natl.Acad.Sci USA. Dec;86(24).9911-5 (1989) PMID: 2481318. **WB, IF**

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