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Product Information

Monoclonal Anti-Fibroblast Growth Factor-Basic
Clone 10060
produced in mouse, purified immunoglobulin

Catalog Number **F5305**

Product Description

Monoclonal Anti-Fibroblast Growth Factor Basic (FGF2) (mouse IgG2B isotype) is purified from a hybridoma produced by the fusion of mouse myeloma cells and B cells from a mouse immunized with recombinant human Fibroblast Growth Factor Basic (GeneID 2247) expressed and purified from *Escherichia coli*. The antibody is purified by Protein G affinity chromatography.

Monoclonal Anti-Fibroblast Growth Factor Basic recognizes human Fibroblast Growth Factor Basic. This antibody was selected for use as a capture antibody in human FGF basic sandwich ELISAs. It also recognizes bovine FGF basic. In capture ELISAs, this antibody shows approximately 0.2% cross-reactivity with bovine FGF acidic, and no cross-reactivity with rhFGF acidic, rhFGF-4, rhFGF-6, or rhFGF-7.

Fibroblast Growth Factor Basic (also known as bFGF) is a potent mitogenic agent for a wide variety of mesoderm-derived cells including BALB/c 3T3 fibroblasts, capillary and endocardial endothelial cells, myoblasts, vascular smooth muscle cells, mesothelial cells, glial and astroglial cells, and adrenal cortex cells.[1,2] bFGF and Fibroblast Growth Factor Acidic (aFGF) share a 55% homology in amino acid sequence,[3] and act upon the same cellular receptors with differing specific activities, depending on the cell type.[4] These two mitogens may play important roles *in vivo* in cell proliferation and differentiation associated with embryogenesis, tissue regeneration, CNS development, wound healing, angiogenesis, and tumor progression.[2] bFGF is found in a variety of organs. It acts on a wide range of cell types and has multifunctional actions. bFGF has numerous synonyms, including heparin-binding growth factor (class II or β), eye-derived growth factor I, cartilage derived growth factor, and astroglial growth factor II.[5] Purified bovine and human bFGF differ by only 3 amino acids in sequence[3] and are biologically and immunologically cross-reactive.

Reagent

Supplied lyophilized from a 0.2 µm filtered solution of phosphate buffered saline with 5% trehalose.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

To one vial of lyophilized powder, add 1 mL of 0.2 µm filtered PBS to produce a 0.5 mg/mL stock solution. If aseptic technique is used, no further filtration should be necessary for use in cell culture environments.

Storage/Stability

Prior to reconstitution, store at –20 °C. Reconstituted product may be stored at 2-8 °C for up to one month. For extended storage, freeze in working aliquots at –20 °C. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended.

Product Profile

Capture ELISA: this antibody can be used as a capture antibody in a human FGF basic ELISA in combination with a biotinylated human FGF basic monoclonal detection antibody. The suggested coating concentration range is 2-8 µg/mL.

Note: In order to obtain the best results using various techniques and preparations, we recommend determining the optimal working dilutions by titration.

References

1. Gospodarowicz, D., *Nature*, **249**, 123 (1974).
2. Gospodarowicz, D., et al., *Endocr. Rev.*, **8**, 95 (1987).
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4. Neufeld, G., and Gospodarowicz, D., *J. Biol. Chem*., **261**, 5631 (1986).

5. Lobb, R. R., et al., *Anal. Biochem*., **154**, 1 (1986).

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