

**Rat Recombinant FGF-2
GROWTH FACTOR**

basic fibroblast growth factor

Catalog Number: PR-09
Quantity: PBS (0.14 M Sodium Chloride; 0.003 M Potassium Chloride; 0.002 M Potassium Phosphate; 0.01 M Sodium Phosphate; pH 7.4). Sterile-filtered.

Background:

FGF-2 is a 155 amino acid single-chain polypeptide heparin binding growth factor with mitogenic and angiogenic properties. It is a potent inducer of DNA synthesis in a variety of cell types. FGF-2 is required for the maintenance of human embryonic stem cells in culture, as well as various other stem cell lines. It is also involved in a variety of other cell processes, including cell growth, morphogenesis, tissue repair, tumor growth, and embryonic development.

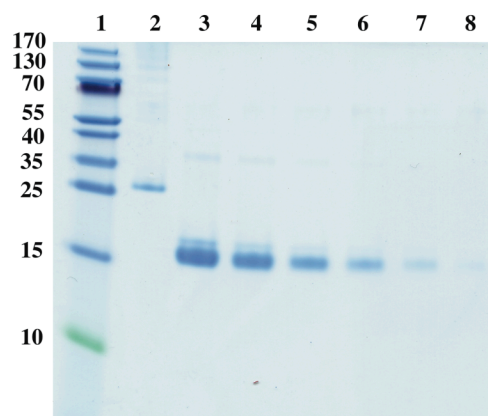
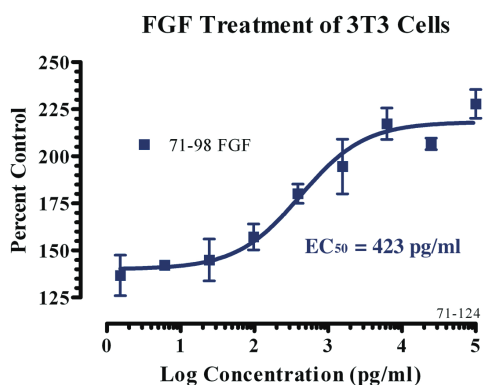
Specificity and Preparation:

Rat recombinant FGF-2 (basic fibroblast growth factor) is produced in bacteria and purified by heparin sepharose affinity chromatography. The purified protein has been sterile filtered. The activity of this protein is tested by proliferation assay on 3T3 cells.

Usage and Storage:

FGF-2 can be used to optimize cell culture conditions for a variety of cell types. It also has uses in bone regeneration and angiogenesis models.

Store at -20°C in undiluted aliquots for 1 year. Avoid repeated freezing and thawing.



Lane 1: PAGERuler (5 µl)
Lane 2: 1 µg saporin
Lane 3: 3 µg FGF
Lane 4: 2 µg FGF
Lane 5: 1 µg FGF
Lane 6: 0.5 µg FGF
Lane 7: 0.25 µg FGF
Lane 8: 0.1 µg FGF

FGF-2 was diluted across the plate in serum-free medium (SFM) in 50-µl volumes. 3T3 cells were washed in SFM, then added to the plate at 2000 cells per 50 µl per well. The plate was incubated for 96 hours at 37°C with 5% CO₂. The medium was dumped off of the plate, and the cells were fixed with ice-cold 10% TCA for 1 hour at 4°C. The plate was washed 3 times with tap water and allowed to air dry. 50 µl of 0.4% sulfarhodamine B/1% acetic acid was added to each well and the plate was incubated for 30 minutes at room temperature. The plate was washed 3 times with 1% acetic acid and allowed to air dry. The dye was solubilized with 100 µl of 10 mM unbuffered tris base per well, with 5 minutes of gentle shaking. The plate was read at 564 nm, and data analysis was done with Prism software (GraphPad, San Diego).

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