



Product Information

Monoclonal Anti-Human Fibroblast Growth Factor-4 IgG Fraction of Mouse Ascites Fluid Clone 19805.11

Product No. F 2153

Product Description

Monoclonal Anti-Human Fibroblast Growth Factor-4 (FGF-4) (IgG1 isotype) is purified from the 19805.11 hybridoma produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice. Human, recombinant fibroblast growth factor-4 (rhFGF-4), expressed in *E. coli*, was used as immunogen. The antibody is purified by Protein A affinity chromatography.

Fibroblast growth factor-4 is a member of the FGF family, a group of 7 homologous polypeptides that act upon a variety of cells and produce biological actions that may include cell proliferation, migration and differentiation.^{1,2} FGF-4, also known as oncogene products *hst-1* and K-FGF, has strong transforming potential and is a potent angiogenic factor, being expressed in several highly vascularized tumors.^{3,4} Anti-Human FGF-4 neutralizes the bioactivity of recombinant, human FGF-4 but not that of bovine or human, recombinant FGF-Basic, bovine or human, recombinant FGF-Acidic, human, recombinant FGF-5, human, recombinant FGF-6, or human, recombinant β -ECGF. In indirect ELISA and immunoblotting, this antibody displays no cross-reactivity with bovine or human, recombinant FGF-Basic, bovine or human, recombinant FGF-Acidic, or human, recombinant β -ECGF.

Reagents

Monoclonal Anti-FGF-4 is provided lyophilized from phosphate buffered saline, pH 7.4, to which no preservatives are added.

Storage/Stability

Prior to reconstitution, store at -20°C for 6 months. Reconstituted product may be stored at $0-5^{\circ}\text{C}$ for up to one month. For prolonged storage, freeze in working aliquots at -20°C . Avoid repeated freezing and thawing.

Reconstitution and Use

To one vial of lyophilized powder, add 1 ml of sterile-filtered PBS to produce a 0.5 mg/ml stock solution of Anti-Human FGF-4. If aseptic technique is used, no further filtration should be needed for use in cell culture environments.

Product Profile

Anti-Human FGF-4 is tested for its ability to neutralize the bioactivity of rhFGF-4 in a cell proliferation assay using FGF-4 responsive NR6-3T3 fibroblasts.⁵ The ND_{50} of the antibody is defined as the concentration of antibody resulting in a one-half maximal inhibition of bioactivity of rhFGF-4, which is present at five times its own EC_{50} (the concentration of rhFGF-4 producing a one-half maximal bioactivity without antibody). In this bioassay, rhFGF-4 was pre-incubated with various dilutions of the antibody for 1 hour at 37°C in a 96-well microtiter plate. Then, the antigen-antibody mixtures were added to quiescent confluent NR6-3T3 cultures in 0.1 ml containing 0.5 ng/ml rhFGF-4. This was incubated for 20 hours at 37°C in a 5% CO_2 humidified incubator and then pulsed for 2 hours with ^3H -thymidine. Cells were harvested onto glass filters and the ^3H -thymidine incorporation into DNA was measured.

References

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