

FGF-2

Fibroblast Growth Factor, basic bovine, recombinant, *E. coli*

Cat. No.	Amount
PR-417	50 μ g

For *in vitro* use only
Quality guaranteed for 12 months
Store at -20°C

Avoid freeze / thaw cycles

Form

Lyophilized. Recombinant FGF-2 was lyophilized from a 1 mg/ml solution containing 1% BSA.

Solubility

It is recommended to reconstitute the lyophilized FGF in sterile bidest H₂O not less than 100 μ g/ml, which can then be further diluted to other aqueous solutions.

Activity

ED₅₀: < 0.1 ng/ml, corresponding to a specific activity of 2.4 x 10⁶ Units/mg, measured in a mitogenic assay using quiescent NR6R-3T3 fibroblasts.

Endotoxin

Less than 0.1 ng/ μ g (IEU/ μ g) of FGF.

Molecular Weight

17 kDa

Purity

≥ 95% by SDS-PAGE and RP-HPLC

Description

FGF-2 is a single-chain polypeptide growth factor that plays a significant role in the process of wound healing and is a potent inducer of angiogenesis. The growth factor is an extremely potent inducer of DNA synthesis in a variety of cell types from mesoderm and neuroectoderm lineages. It was originally named basic fibroblast growth factor based upon its chemical properties and to distinguish it from acidic fibroblast growth factor.

Recombinant Bovine FGF-2 (FGF-b) produced in *E. coli* is a single, non-glycosylated, polypeptide chain having a molecular mass of 17.48 kDa.

The rbFGF-2 is purified by proprietary chromatographic techniques.

Selected References:

- Talbot *et al.* (2004) Comparison of colony-formation efficiency of bovine fetal fibroblast cell lines cultured with low oxygen, hydrocortisone, L-carnosine, bFGF, or different levels of FBS. *Cloning Stem Cells* **6**:37.
- Neuvians *et al.* (2004) Vascular endothelial growth factor (VEGF) and fibroblast growth factor (FGF) expression during induced luteolysis in the bovine corpus luteum. *Mol. Reprod. Dev.* **67**:389.
- Berisha *et al.* (2004) Expression and localization of fibroblast growth factor (FGF) family members during the final growth of bovine ovarian follicles. *Mol. Reprod. Dev.* **67**:162.
- Neuvians *et al.* (2004) Involvement of pro-inflammatory cytokines, mediators of inflammation, and basic fibroblast growth factor in prostaglandin F₂alpha-induced luteolysis in bovine corpus luteum. *Biol. Reprod.* **70**:473.
- Saito *et al.* (2003) Generation of cloned calves and transgenic chimeric embryos from bovine embryonic stem-like cells. *Biochem. Biophys. Res. Commun.* **309**:104.