

KGF-2

Keratinocyte Growth Factor 2

human, recombinant, *E. coli*

Cat. No.	Amount
PR-479	25 µg

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

Avoid freeze / thaw cycles

Form

Lyophilized. KGF-2 is lyophilized from a 1 mg/ml solution containing 5 mM Sodium phosphate buffer pH 7.4 and 80 mM NaCl.

Solubility

It is recommended to reconstitute the lyophilized KGF in bidest H₂O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Activity

ED₅₀: < 0.5 ng/ml, corresponding to a specific activity 2 × 10⁶ IU/mg, stimulation of KGF-responsive BaF3 indicator cells (measured by 3H-thymidine uptake).

Purity

≥ 95% by SDS-PAGE and RP-HPLC

Description

Keratinocyte growth factor-2 (KGF-2), also described as fibroblast growth factor-10 (FGF-10), is a member of the fibroblast growth factor family. KGF-2 shares 57% sequence homology to KGF-1 (FGF-7). It selectively induces epithelial cell proliferation, differentiation and migration. KGF stimulates the proliferation of primary and secondary human keratinocytes to the same extent as EGF.

Recombinant human KGF-2 (FGF-10) produced in *E. coli* is a single, non-glycosylated polypeptide chain containing 170 amino acids and having a molecular mass of 19.3 kDa.

KGF-2 is highly related to KGF-1 (FGF-7), it binds to the same receptor as KGF-1 and shares 57% sequence homology.

Recombinant KGF-2 is purified by proprietary chromatographic techniques.

Selected References:

- Kovacs *et al.* (2005) Immunohistochemical analysis of keratinocyte growth factor and fibroblast growth factor 10 expression in psoriasis. *Exp. Dermatol.* **14**:130.
- Entesarian *et al.* (2005) Mutations in the gene encoding fibroblast growth factor 10 are associated with aplasia of lacrimal and salivary glands. *Nat. Genet.* **37**:125.
- Hyatt *et al.* (2004) FGF-10 induces SP-C and Bmp4 and regulates proximal-distal patterning in embryonic tracheal epithelium. *Am. J. Physiol. Lung. Cell. Mol. Physiol.* **287**:L1116.
- Lovinescu *et al.* (2003) Roles of FGF-10 on the development of diarthrodial limb joints. *Penn. Dent. J. (Phila.)*. **103**:5.
- Asaki *et al.* (2004) Roles of fibroblast growth factor 10 (Fgf10) in adipogenesis *in vivo*. *Mol. Cell. Endocrinol.* **218**:119.
- Yucel *et al.* (2004) Anatomical studies of the fibroblast growth factor-10 mutant, Sonic Hedge Hog mutant and androgen receptor mutant mouse genital tubercle. *Adv. Exp. Med. Biol.* **545**:123.