

Rev03
Update: Dec,14,2021

DATASHEET

KGF/FGF-7, Human

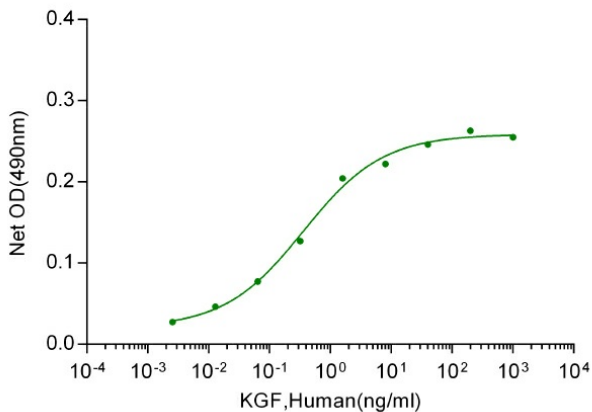
Cat. No.: Z03047

Product Introduction

Species	Human
Protein Construction	Expressed with an N-terminal Met. FGF-7 (Cys32-Thr194) Accession # P21781
Purity	> 95% as analyzed by SDS-PAGE > 95% as analyzed by HPLC
Endotoxin Level	< 0.2 EU/μg of protein by gel clotting method
Biological Activity	ED ₅₀ < 2.0 ng/ml, measured by a cell proliferation assay using 4MBr-5 cells, corresponding to a specific activity of > 5.0 × 10 ⁵ units/mg.
Expression System	E. coli
Apparent Molecular Weight	~19 kDa, on SDS-PAGE under reducing conditions.
Formulation	Lyophilized after extensive dialysis against PBS.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH ₂ O up to 100 μg/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

Examples

ED₅₀ < 2 ng/ml, measured by a cell proliferation assay using 4MBr-5 cells, corresponding to a specific activity of > 5.0 × 10⁵ units/mg.



Background

Target Background : Keratinocyte Growth Factor (KGF) is a highly specific epithelial mitogen produced by fibroblasts and mesenchymal stem cells. KGF belongs to the heparin binding Fibroblast Growth Factor (FGF) family, and is known as FGF-7. However, in contrast to the FGF-1, which binds to all known FGF receptors with high affinity, KGF only binds to a splice variant of an FGF receptor, FGFR2-IIIb. FGFR2-IIIb is produced by most of the epithelial cells, indicating that KGF plays roles as a paracrine mediator. KGF induces the differentiation and proliferation of various epithelial cells, including keratinocytes in the epidermis, hair follicles and sebaceous glands, and is responsible for the wound repairs of various tissues, including lung, bladder, and kidney.

Synonyms : Keratinocyte Growth Factor; Fibroblast Growth Factor-7; HBGF-7; FGF7

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