Recombinant Human FGF-10

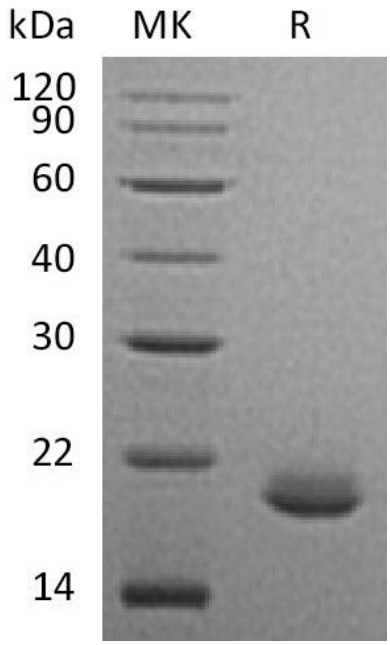
Catalog No.: RP0004

Basic Information

Information	
Source	*E.coli*
Description	Recombinant Human Fibroblast Growth Factor 10 is produced by our E.coli expression system and the target gene encoding Gln38-Ser208 is expressed.
Accession	O15520
Known As	Fibroblast growth factor 10;FGF-10;Keratinocyte growth factor 2;FGF10;KGF-2;KGF2
Predicted Mol Mass	19.5 KDa
Apparent Mol Mass	19-22 KDa, reducing conditions
Properties	
Formulation	Lyophilized from a 0.2 μm filtered solution of 10mM Tris, 5% Sucrose, 4% Mannitol, 0.02% Tween80, pH8.0.
Storage	Lyophilized protein should be stored at ≤ -20°C, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8°C for 2-7 days. Aliquots of reconstituted samples are stable at ≤ -20°C for 3 months.
Endotoxin	< 0.01 EU/μg as determined by LAL test.
Reconstitution	Always centrifuge tubes before opening.Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100μg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.

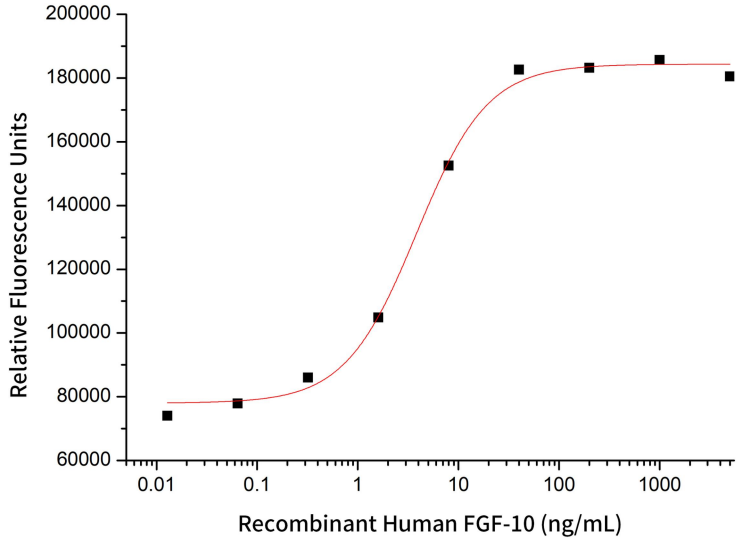
Experimental Data

Purity-SDS-PAGE



Greater than 95% as determined by reducing SDS-PAGE.

Bioactivity-Cell Based Assay



Measured by its ability to induce FGFRIIIb receptor activity in HEK293T human embryonic kidney cells.The ED50 for this effect is 3.82ng/ml (Regularly tested).

Background

Fibroblast growth factor 10 (FGF-10, KGF-2), is a member of the fibroblast growth factor (FGF) family that includes FGF-3, -7, and -22. KGF-2 is secreted by mesenchymal cells and associates with extracellular FGF-BP. It preferentially binds and activates epithelial cell FGFR2 and interacts more weakly with FGFR1. It plays an important role in the regulation of embryonic development, cell proliferation and cell differentiation. It exhibits mitogenic activity for keratinizing epidermal cells, but essentially no activity for fibroblasts, which is similar to the biological activity of FGF7. FGF10 is required for normal branching morphogenesis. Defects in FGF10 are the cause of autosomal dominant aplasia of lacrimal and salivary glands (ALSG). ALSG has variable expressivity, and affected individuals may have aplasia or hypoplasia of the lacrimal, parotid, submandibular and sublingual glands and absence of the lacrimal puncta. The disorder is characterized by irritable eyes, recurrent eye infections, epiphora (constant tearing) and xerostomia (dryness of the mouth), which increases the risk of dental erosion, dental caries, periodontal disease and oral infections.