Datasheet for ABIN1672808

# FGF7 ELISA Kit

## 1 Image

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## Overview

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| Quantity: | 96 tests |
| Target: | FGF7 |
| Binding Specificity: | AA 32-194 |
| Reactivity: | Human |
| Method Type: | Sandwich ELISA |
| Detection Range: | 31.2-2000 pg/mL |
| Minimum Detection Limit: | 31.2 pg/mL |
| Application: | ELISA |

## Product Details

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| Purpose: | Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human FGF7/KGF |
| Brand: | PicoKine™ |
| Sample Type: | Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA), Plasma (citrate) |
| Analytical Method: | Quantitative |
| Detection Method: | Colorimetric |
| Immunogen: | Expression system for standard: E.coli<br>Immunogen sequence: C32-T194 |
| Specificity: | Expression system for standard: E.coli<br>Immunogen sequence: C32-T194 |
| Cross-Reactivity (Details): | There is no detectable cross-reactivity with other relevant proteins. |

## Product Details

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| Sensitivity: | <4pg/mL |
| Material not included: | Microplate reader in standard size. Automated plate washer. Adjustable pipettes and pipette tips. Multichannel pipettes are recommended in the condition of large amount of samples in the detection. Clean tubes and Eppendorf tubes. Washing buffer (neutral PBS or TBS). Preparation of 0.01M TBS: Add 1.2g Tris, 8.5g Nacl |

## Target Details

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| Target: | FGF7 |
| Alternative Name: | FGF7 (FGF7 Products) |
| Background: | Protein Function: Plays an important role in the regulation of embryonic development, cell proliferation and cell differentiation. Required for normal branching morphogenesis. Growth factor active on keratinocytes. Possible major paracrine effector of normal epithelial cell proliferation. .<br>Background: Keratinocyte growth factor is a protein that in humans is encoded by the FGF7 gene. The protein encoded by this gene is a member of the fibroblast growth factor(FGF) family. FGF family members possess broad mitogenic and cell survival activities, and are involved in a variety of biological processes, including embryonic development, cell growth, morphogenesis, tissue repair, tumor growth and invasion. This protein is a potent epithelial cell-specific growth factor, whose mitogenic activity is predominantly exhibited in keratinocytes but not in fibroblasts and endothelial cells. Studies of mouse and rat homologs of this gene implicated roles in morphogenesis of epithelium, reepithelialization of wounds, hair development and early lung organogenesis.<br>Synonyms: Fibroblast growth factor 7,FGF-7,Heparin-binding growth factor 7,HBGF-7,Keratinocyte growth factor,FGF7,KGF,<br>Full Gene Name: Fibroblast growth factor 7<br>Cellular Localisation: Secreted. |
| Gene ID: | 2252 |
| UniProt: | P21781 |
| Pathways: | RTK Signaling, Fc-epsilon Receptor Signaling Pathway, EGFR Signaling Pathway, Neurotrophin Signaling Pathway |

## Application Details

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| Application Notes: | Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well |

## Application Details

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| | assay was recommended for both standard and sample testing. |
| Comment: | Tissue Specificity: Epithelial cell. |
| Plate: | Pre-coated |
| Protocol: | human FGF7 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for FGF7 has been precoated onto 96-well plates. Standards(E.coli, C32-T194) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for FGF7 is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the human FGF7 amount of sample captured in plate. |
| Assay Procedure: | Aliquot 0.1 mL per well of the 2000pg/mL,1000pg/mL, 500pg/mL, 250pg/mL, 125pg/mL, 62.5pg/mL, 31.2pg/mL human FGF7 standard solutions into the precoated 96-well plate. Add 0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each properly diluted sample of human cell culture supernates, serum or plasma(heparin, EDTA, citrate) to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each human FGF7 standard solution and each sample be measured in duplicate. |
| Assay Precision: | • Sample 1: n=16, Mean(pg/ml): 156, Standard deviation: 6.40, CV(%): 4.1<br>• Sample 2: n=16, Mean(pg/ml): 645, Standard deviation: 27.09, CV(%): 4.2<br>• Sample 3: n=16, Mean(pg/ml): 1278, Standard deviation: 70.29, CV(%): 5.6,<br>• Sample 1: n=24, Mean(pg/ml): 147, Standard deviation: 12.35, CV(%): 8.4<br>• Sample 2: n=24, Mean(pg/ml): 649, Standard deviation: 39.59, CV(%): 6.1<br>• Sample 3: n=24, Mean(pg/ml): 1226, Standard deviation: 78.46, CV(%): 6.4 |
| Restrictions: | For Research Use only |

## Handling

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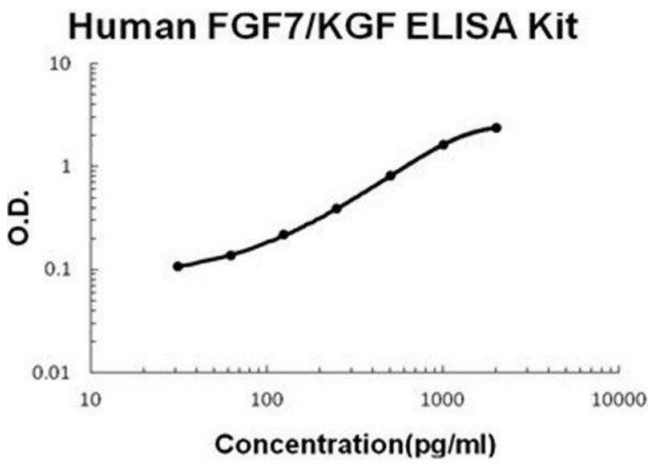
| Handling Advice: | Avoid multiple freeze-thaw cycles. |
| Storage: | -20 °C,4 °C |
| Storage Comment: | Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles |
| Expiry Date: | 12 months |




## ELISA

**Image 1.** Human FGF7/KGF PicoKine ELISA Kit standard curve