Recombinant FGF4 protein (His tag)

Catalog Number	537455
Synonyms	FGF-4; Heparin secretory-transforming protein 1; HST; HST-1; HSTF-1; Heparin-binding growth factor 4; HBGF-4; Transforming protein KS3
Species	Human
Expression System	E. coli
Accession	P08620
Molecular Weight	Predictes a molecular mass of 20.24 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 20 kDa band.

Product Information

Sequence Region	39-206
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 39-206 aa (P08620) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human Fibroblast Growth Factor 4 (FGF-4) Fragment (aa 39-206) is a high-quality protein product designed for structural and biochemical research. This 168-amino acid fragment has been computationally selected for optimal stability and solubility, making it an ideal tool for studying FGF-4's critical roles in embryonic development, cell proliferation, and differentiation processes. Fibroblast Growth Factor 4 (FGF-4) is a secreted signaling protein that plays essential roles in embryonic development, particularly in limb formation and cardiac valve development. As a heparin-binding growth factor, FGF-4 regulates cell proliferation and differentiation processes and has been implicated in embryonic molar tooth bud development through its induction of MSX1, MSX2, and SDC1 expression in dental mesenchyme cells. The protein's secretory nature, as indicated by its subcellular location, enables its function as an extracellular signaling molecule in developmental pathways and cellular communication networks.