Recombinant FGF12 protein (His tag)

Catalog Number	544751
Synonyms	FGF-12; Fibroblast growth factor homologous factor 1; FHF-1; Myocyte-activating factor
Species	Human
Expression System	E. coli
Accession	P61328
Molecular Weight	Predictes a molecular mass of 21.38 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 21 kDa band.

Product Information

Sequence Region	69-243
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 69-243 aa (P61328) 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	This product is a recombinant fragment of human Fibroblast growth factor 12 (FGF-12), encompassing amino acids 69-243. FGF-12 is a key regulator in nervous system development and neuronal excitability, and this 175-amino acid fragment has been carefully selected for its stability and solubility, making it ideal for structural studies and biochemical assays. Fibroblast growth factor 12 (FGF-12), also known as Fibroblast growth factor homologous factor 1 (FHF-1) or Myocyte-activating factor, is a human protein involved in nervous system development and function. It plays a critical role in modulating neuronal excitability by positively regulating voltage-gated sodium channel activity, specifically by elevating the voltage dependence of fast inactivation of neuronal sodium channel SCN8A. This regulatory function contributes to the maintenance of proper neuronal signaling. The full-length protein is localized to the nucleus, suggesting potential roles in nuclear processes alongside its channel regulatory functions. The provided fragment represents a stable, soluble region optimized for experimental applications while retaining key structural features of the native protein.