

Recombinant Human FGF13 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50311

Size: 10ug, 100ug

Protein Name: Fibroblast growth factor 13 (FGF-13) (Fibroblast growth factor homologous factor 2) (FHF-2)

Synonym: FGF13, FHF2

UniProt ID: Q92913

UniProt Link: www.uniprot.org/uniprotkb/Q92913/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 245 AA

Molecular Weight: 28 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MAAAIASSLIRQKRQAREREKSNACKCVSSPSKGTSCDKNKLNVF SRVKLFGSKKRRRRRPEPQL
KGIVTKLYSRQGYHLQLQADGTIDGTDEEDSTYTLFNLIPVGLRVVAIQGVQTKLYLAMNSEGYLYTS
ELFTPECKFKESVFENYYVTYSSMIYRQQQSGRGWYLG LNKEGEIMKGNHVKKNKPAAHFLPKPLK
VAMYKEPSLHDLTEFSRSGSGTPTKRSVSGLNNGKSM SHNEST

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant Fibroblast growth factor 13 (FGF-13) (Fibroblast growth factor homologous factor 2) (FHF-2) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: Microtubule-binding protein which directly binds tubulin and is involved in both polymerization and stabilization of microtubules (By similarity). Through its action on microtubules, may participate in the refinement of axons by negatively regulating axonal and leading processes branching (By similarity). Plays a crucial role in neuron polarization and migration in the cerebral cortex and the hippocampus (By similarity). Regulates voltage-gated sodium channel transport and function (PubMed:15282281, PubMed:33245860, PubMed:36696443). May also play a role in MAPK signaling (By similarity). Required for the development of axonal initial segment-targeting inhibitory GABAergic synapses made by chandelier neurons (By similarity).

Subcellular Localization: [Isoform 1]: Nucleus .; [Isoform 2]: Cytoplasm . Nucleus .; [Isoform 3]: Cytoplasm . Nucleus .; [Isoform 4]: Cytoplasm . Nucleus .; [Isoform 5]: Cytoplasm . Nucleus .; Cell projection, filopodium . Cell projection, growth cone . Cell projection, dendrite . Cell membrane, sarcolemma . Cytoplasm . Note=Not secreted. Localizes to the lateral membrane and intercalated disks of myocytes.

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.