

Recombinant Mouse FGF13 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51497

Size: 10ug, 100ug

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

Synonym: Fgf13, Fhf2

UniProt ID: P70377

UniProt Link: www.uniprot.org/uniprotkb/P70377/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 245 AA

Molecular Weight: 28 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MAAAIASSLIRQKRQAREREKSNACKCVSSPSKGTSCDKNKLNVFSSRVKLFSGSKRRRRRRPEPQL
KGIVTKLYSRQGYHLQLQADGTIDGTDEEDSTYTLFNLIPVGLRVVAIQGVQTKLYLAMNSEGYLYTS
EHFTPECKFKESVFENYYVTYSSMIYRQQQSGRGWYLGHNKEGEIMKGNHVKKNKPAAHFLPKPLK
VAMYKEPSLHDLTEFSRSGSGTPTKRSVSGLNNGKSMHNEST

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 (PubMed:22726441). Through its action on microtubules, may participate to the refinement of axons by negatively regulating axonal and leading processes branching (PubMed:22726441). Plays a crucial role in neuron polarization and migration in the cerebral cortex and the hippocampus (PubMed:22726441). Regulates voltage-gated sodium channel transport and function (PubMed:21817159). May also play a role in MAPK signaling (PubMed:11378392, PubMed:12244047). Required for the development of axonal initial segment-targeting inhibitory GABAergic synapses made by chandelier neurons (PubMed:30679375).; [Isoform 1]: Does not seem to be involved in neuroblast polarization and migration but regulates axon branching.

Subcellular Localization: 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.; [Isoform 1]: Nucleus .; [Isoform 2]: Cytoplasm . Nucleus .; [Isoform 3]: Cytoplasm . Nucleus .

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.