

Recombinant Human FGF23 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50321

Size: 10ug, 100ug

Protein Name: Fibroblast growth factor 23 (FGF-23) (Phosphatonin) (Tumor-derived hypophosphatemia-inducing factor) [Cleaved into: Fibroblast growth factor 23 N-terminal peptide; Fibroblast growth factor 23 C-terminal peptide]

Synonym: FGF23, HYPF, UNQ3027/PRO9828

UniProt ID: Q9GZV9

UniProt Link: www.uniprot.org/uniprotkb/Q9GZV9/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 251 AA

Molecular Weight: 28 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MLGARLRLWVCALCSVCSMSVLRAYPNASPLLGSSWGGLIHLYTATARN SYHLQIHKNGHVDGAPH
QTIYSALMIRSEDAGFVVITGVMSRRYLCMDFRGNIFGSHYFDPENCRFQHQTLENGYDVYHSPQYH
FLVSLGRAKRAFLPGMNPYPYSQFLSRNEIPLIHFNTPIPRRHTRSAEDDSERDPLNVLKPRARMTP
APASCSQELPSAEDNSPMASDPLGVVRGGRVNT HAGGTGPEGCRPFAKFI

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 23 (FGF-23) (Phosphatonin) (Tumor-derived hypophosphatemia-inducing factor) [Cleaved into: Fibroblast growth factor 23 N-terminal peptide; Fibroblast growth factor 23 C-terminal peptide] 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: Regulator of phosphate homeostasis (PubMed:11062477). Inhibits renal tubular phosphate transport by reducing SLC34A1 levels (PubMed:11409890). Up-regulates EGR1 expression in the presence of KL (By similarity). Acts directly on the parathyroid to decrease PTH secretion (By similarity). Regulator of vitamin-D metabolism (PubMed:15040831). Negatively regulates osteoblast differentiation and matrix mineralization (PubMed:18282132).

Subcellular Localization: Secreted . Note=Secretion is dependent on O-glycosylation.

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.