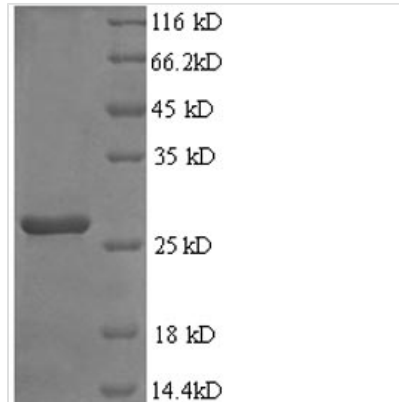




Recombinant Rat Fibroblast growth factor 23 (Fgf23)

Product Code	CSB-EP008629RA
Relevance	Regulator of phosphate homeostasis . Inhibits renal tubular phosphate transport by reducing SLC34A1 levels . Regulator of vitamin-D metabolism . Negatively regulates osteoblasts differentiation and matrix mineralization . Acts directly on the parathyroid to decrease PTH secretion. Upregulates EGR1 expression in the presence of KL.
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	Q8VI82
Product Type	Recombinant Protein
Immunogen Species	Rattus norvegicus (Rat)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	YSDTSPLLGSNWGSLTHLYTATARNSYHLQIHRDGHVDGTPHQTIYSALMITSE DAGSVVIIGAMTRRFLCMDLRGNIFGSYHFSPENCRFRQWTLENGYDVYLSPK HHYLVSLGRSKRIFQPGTNPPPFSSQFLARRNEVPPLLHFYTARPRRHTRSAEDP PERDPLNVLKPRPRATPIPVSCSRELPSAEEGGPAASDPLGVLRGRGDARR GAGGTDRCRPFPRFV
Lead Time	3-7 business days
Research Area	Others
Source	E.coli
Gene Names	Fgf23
Expression Region	25-251aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged
Mol. Weight	29.5kDa
Protein Description	Full Length of Mature Protein
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

To produce recombinant Rat Fgf23 protein, a well-established recombinant DNA technology is the key. A DNA template of Fgf23 was constructed with N-terminal 6xHis tag using the technique. Once the template was made, the recombinant Rat Fgf23 protein could be produced with it efficiently. CUSABIO has built a strict QC system to ensure quality. The expression region is 25-251aa of the Rat Fgf23. The purity of this recombinant is 90% determined by SDS-PAGE.

FGF23 is a protein coding gene that encodes Fibroblast growth factor 23. According to some studies, FGF23 may have the following features. FGF23 induces left ventricular hypertrophy. Targeted ablation of Fgf23 demonstrates an important physiological role of FGF23 in phosphate and vitamin D metabolism. FGF23 is a hormone that regulates phosphate metabolism—a unique biological feature of FGF23. Klotho converts the canonical FGF receptor into a specific receptor for FGF23. The rat parathyroid gland is a target organ of FGF23. Mutations in the FGF23 gene cause autosomal dominant hypophosphatemic rickets, possibly by preventing the proteolytic cleavage of FGF23 and enhancing its biological activity. Parathyroid hormone and FGF23 target the kidneys and cause phosphaturia. FGF23 also acts on the parathyroid glands to reduce PTH expression, but in chronic kidney disease.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.