Recombinant FA20C protein (His tag)

Catalog Number	545391
Synonyms	Dentin matrix protein 4; DMP-4; Golgi casein kinase; Golgi-enriched fraction casein kinase; GEF-CK
Species	Human
Expression System	E. coli
Accession	Q8IXL6
Molecular Weight	Predictes a molecular mass of 44.50 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 46 kDa band.

Product Information

Sequence Region	220-584
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 220-584 aa (Q8IXL6) 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	Recombinant human FAM20C protein fragment (residues 220-584) offers a stable and soluble unit of the extracellular serine/threonine protein kinase FAM20C, essential for studying its role in secretory pathway phosphorylation and biomineralization. This fragment is ideal for structural, biochemical, and functional assays, providing researchers with a reliable tool to explore kinase activity and substrate interactions. FAM20C is a Golgi serine/threonine protein kinase that phosphorylates secretory pathway proteins within Ser-x-Glu/pSer motifs, playing a critical role in biomineralization of bones and teeth, as well as in lipid homeostasis, wound healing, and cell migration. It generates the majority of the extracellular phosphoproteome and phosphorylates key proteins involved in biomineralization, such as AMELX and SPP1/OPN, and regulates endoplasmic reticulum redox homeostasis through targets like ERO1A and P4HB/PDIA1. Located in the Golgi apparatus membrane and secreted after propeptide cleavage, FAM20C also translocates to the endoplasmic reticulum under stress conditions to modulate proteostasis and cell survival. This recombinant fragment represents a computationally selected stable region for experimental applications.