



Recombinant Protein Technical Manual
Recombinant Human FAM20C/DMP4 Protein (His
Tag)
RPES3156

Product Data:

Product SKU: RPES3156

Size: 20µg

Species: Human

Expression host: Baculovirus-Insect Cells

Uniprot: NP_064608.2

Protein Information:

Molecular Mass: 65.1 kDa

AP Molecular Mass:

Tag: C-His

Bio-activity:

Purity: > 85 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg of the protein as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile 20 mM Tris, 500 mM NaCl, pH 8.0, 10 % glycerol

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: DMP-4;DMP4;GEF-CK;RNS

Immunogen Information:

Sequence: Met 1-Arg584

Background:

Fam20C is a protein kinase dedicated to the phosphorylation of extracellular proteins, including caseins, and is localized within the Golgi apparatus and also is secreted. It phosphorylates the caseins as well as several other secreted proteins such as AMELX, AMTN, ENAM, SPP1 and the small integrin-binding ligand N-linked glycoproteins SIBLINGs implicated in biomineralization. Consequently, mutations in Fam20C cause an osteosclerotic bone dysplasia in humans known as Raine syndrome and hypophosphatemic rickets. The discovery of the function of Fam20C has solved a 130-year-old mystery of the identity of the kinases that phosphorylate caseins and has shed light on several human disorders of biomineralization. In addition to its role in biomineralization, Fam20C also plays a role in lipid homeostasis, wound healing and cell migration and adhesion.