



Recombinant Rat Dentin matrix acidic phosphoprotein 1 (Dmp1)

Product Code	CSB-MP006967RA
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Uniprot No.	P98193
Product Type	Recombinant Protein
Immunogen Species	Rattus norvegicus (Rat)
Purity	>85% (SDS-PAGE)
Sequence	<p>LPVA RYQNTSESS EERTGNLAQS PPPPMANS DH TDSSES GEEL GSDRSQYRPA GGLSKSAGMD ADKEEDED DS GDDTFGDEDN GPGPEERQWG GPSRLDSD ED SADTTQSS ED STSQENSAQD TPSDSKDHHS DEADSRPEAG DSTQDSESEE YRVGGGSEGE SSHGDGSEFD DEGMQSDDPG STRSDRGHTR MSSAGIRSEE SKGDHEPTST QDSDDSQDVE FSSRKSFRRS RVSEEDDRGE LADSN SRETQ SVSTEDFRSK EESRSETQED TAETQSQEDS PEGQDPSS ES SEEAGEPSQE SSSESQEGVA SESRGDNP DN TSQTGDQRDS ESSEEDRLNT FSSSESQSTE EQGDSESNES LSLSEESQES AQDEDSSSQE GLQSQSASRE SRSQESQSEQ DSRSEENRDS DSQDSSRSKE ESNSTGSTSS SEEDNHPKNI EADNRKLIVD AYHNKPIGDQ DDNDCQDGY</p>
Source	Mammalian cell
Target Names	Dmp1
Protein Names	Recommended name: Dentin matrix acidic phosphoprotein 1 Short name= DMP-1 Short name= Dentin matrix protein 1 Alternative name(s): AG1
Expression Region	17-489
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	Tag type will be determined during the manufacturing process.
Protein Length	Full Length of Mature Protein
Target Details	Dentin matrix acidic phosphoprotein is an extracellular matrix protein and a member of the small integrin binding ligand N-linked glycoprotein family. This protein, which is critical for proper mineralization of bone and dentin, is present in diverse cells of bone and tooth tissues. The protein contains a large number of acidic domains, multiple phosphorylation sites, a functional arg-gly-asp cell attachment sequence, and a DNA binding domain. In undifferentiated osteoblasts it is primarily a nuclear protein that regulates the expression of osteoblast-specific genes. During osteoblast maturation the protein becomes phosphorylated and is exported to the extracellular matrix, where it orchestrates mineralized matrix formation. Mutations in the gene are known to cause autosomal recessive hypophosphatemia, a disease that manifests as rickets and osteomalacia. The gene structure is conserved in mammals. Two transcript



variants encoding different isoforms have been described for this gene.

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.

Shelf Life

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.