



# Recombinant Rat Dentin matrix acidic phosphoprotein 1 (Dmp1)

<b>Product Code</b>	CSB-YP006967RA
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	P98193
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Rattus norvegicus (Rat)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	<p>LPVA RYQNTSESS EERTGNLAQS PPPPMANS DH TDSSSEGEEL  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 SESRGDNPDN TSQTGDQRDS ESSEEDRLNT FSSSESQSTE  EQGDSESNES LSLSEESQES AQDEDSSSQE GLQSQSASRE  SRSQESQSEQ DSRSEENRDS DSQDSSRSKE ESNSTGSTSS SEEDNHPKNI  EADNRKLIVD AYHNKPIGDQ DDNDCQDGY</p>
<b>Source</b>	Yeast
<b>Target Names</b>	Dmp1
<b>Protein Names</b>	Recommended name: Dentin matrix acidic phosphoprotein 1 Short name= DMP-1 Short name= Dentin matrix protein 1 Alternative name(s): AG1
<b>Expression Region</b>	17-489
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	Full Length of Mature Protein
<b>Target Details</b>	<p>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</p>



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.