



Recombinant Rat Alkaline phosphatase, tissue-nonspecific isozyme (Alpl)

Product Code	CSB-EP001631RA-B
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Uniprot No.	P08289
Product Type	Recombinant Protein
Immunogen Species	Rattus norvegicus (Rat)
Purity	>85% (SDS-PAGE)
Sequence	FVP EKEKDPSYWR QQAQETLKNA LKLQKLNTNV AKNIIMFLGD GMGVSTVTAA RILKGQLHHN TGEETRLEMD KFPFVALSKT YNTNAQVPDS AGTATAYLCG VKANEGTVGV SAATERTRCN TTQGNEVTSI LRWAKDAGKS VGIVTTTRVN HATPSAAYAH SADRDWYSDN EMPPEALSQG CKDIAYQLMH NIKDIDVIMG GGRKYMYPKN RTDVEYELDE KARGTRLDGL DLISIWKSFK PRHKHSHYVW NRTELLALDP SRVDYLLGLF EPGDMQYELN RNNLTDP SLS EMVEVALRIL TKNPKGFFLL VEGGRIDHGH HEGKAKQALH EAVEMDEAIG KAGTMTSQQD TLTVV TADHS HVFTFGGYTP RGN SIFGLAP MVS DTDK KPF TAILYGNPG YKVV DGEREN VSMVDYAHNN YQAQSAVPLR HETHGGEDVA VFAKGPM AHL LHGVHEQNYI PHVMAYASCI GANLDHC AWA S
Source	E.coli
Target Names	Alpl
Protein Names	Recommended name: Alkaline phosphatase, tissue-nonspecific isozyme Short name= AP-TNAP Short name= TNSALP EC= 3.1.3.1 Alternative name(s): Alkaline phosphatase liver/bone/kidney isozyme
Expression Region	18-501
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	There are at least four distinct but related alkaline phosphatases: intestinal, placental, placental-like, and liver/bone/kidney (tissue non-specific). The first three are located together on chromosome 2, while the tissue non-specific form is located on chromosome 1. The product of this gene is a membrane bound glycosylated enzyme that is not expressed in any particular tissue and is, therefore, referred to as the tissue-nonspecific form of the enzyme. The exact physiological function of the alkaline phosphatases is not known. A proposed function of this form of the enzyme is matrix mineralization; however, mice that lack a functional form of this enzyme show normal skeletal development. This enzyme has been linked directly to hypophosphatasia, a disorder that is characterized by hypercalcemia and includes skeletal defects. The character of this disorder can vary, however, depending on the specific mutation since this



determines age of onset and severity of symptoms. Alternatively spliced transcript variants, which encode the same protein, have been identified 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.