Recombinant mouse Alkaline Phosphatase/ALPL protein

Catalog Number: ATGP3469

PRODUCT INFORMATION

Expression system
Baculovirus

Domain
19-503aa

UniProt No.
P09242

NCBI Accession No.
NP_031457

Alternative Names
Alkaline phosphatase, tissue-nonspecific isozyme, Alpl, Akp-2, Akp2, ALP, APTNAP, TNAP, TNSALP, HOPS

PRODUCT SPECIFICATION

Molecular Weight
54.5 kDa (493aa)

Concentration
0.5mg/ml (determined by absorbance at 280nm)

Formulation
Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity
> 95% by SDS-PAGE

Endotoxin level
< 1 EU per 1ug of protein (determined by LAL method)

Biological Activity
Specific activity is > 46,000pmol/min/ug and is defined as the amount of enzyme that hydrolyze 1pmole of 4-Methylumbelliferyl phosphate to phosphate and 4-Methylumbelliferone per minute at pH 8.8 at 25C.

Tag
His-Tag

Application
SDS-PAGE,Enzyme Activity

Storage Condition
Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Recombinant mouse Alkaline Phosphatase/ALPL protein

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Description

Alpl, also known as alkaline phosphatase, tissue-nonspecific isozyme, is one of alkaline phosphatases. There are at least four distinct but related alkaline phosphatases: intestinal, placental, placental-like, and liver/bone/kidney (tissue-nonspecific). 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. A proposed function of this form of the enzyme is matrix mineralization. Recombinant mouse Alpl, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Amino acid Sequence

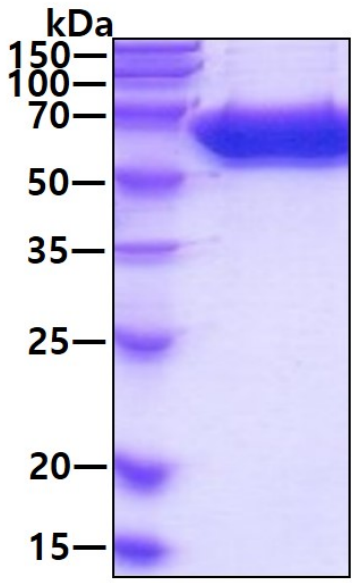
VPEKERDPSY WRQQAQETLK NALKLQKLNT NVAKNVIMFL GDGMGVSTVT AARILKGQLH HNTGEETRLE MDKFPFVALS KTYNTNAQVP DSAGTATAYL CGVKANEGTV GVSAATERTR CNTTQGNEVT SILRWAKDAG KSVGIVTTTR VNHATPSAAY AHSADRDWYS DNEMPPEALS QGCKDIAYQL MHNIKDIDVI MGGGRKYMYP KNRTDVEYEL DEKARGTRLD GLDLISIWKS FKPRHKHSHY VWNRTELLAL DPSRVDYLLG LFEPGDMQYE LNRNNLTDPS LSEMVEVALR ILTKNLKGFF LLVEGGRIDH GHHEGKAKQA LHEAVEMDQA IGKAGAMTSQ KDTLTVVTAD HSHVFTFGGY TPRGNSIFGL APMVSDTDKK PFTAILYGNG PGYKVVDGER ENVSMVDYAH NNYQAQSAVP LRHETHGGED VAVFAKGPMA HLLHGVHEQN YIPHVMAYAS CIGANLDHCA WAGSG<LEHHH HHH>

General References

Whyte MP. et al., (1995) J. Clin Invest. 95:1440-1445
Brun-Heath I. et al., (2011) Cell Tissue Res. 343: 521-536.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.