Active Recombinant Mouse Alkaline Phosphatase, Liver/Bone/Kidney, His-tagged

Cat. No. Alpl-444M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Mouse Alplprotein was expressed in Murine myeloma cell line. Phe18-Gly503, witha C terminal 6 His tag.
Species	Mouse
Source	Mammalian Cells
ProteinLength	18-503 a.a.
Description	Severaldistinct genes encode alkaline phosphatases (APs) in mice with differenttissuespecific expression patterns. The Alpl gene, also known as Akp2,encodes the liver/bone/kidney isozyme, also known as the tissuenonspecific AP(TNAP). The Alpl gene is a key regulator of bone mineralization in mice. Avariety of mutations in the human Alpl gene leads todifferent forms of hypophosphatasia, characterized by poorly mineralizedcartilage and bones.
Form	Suppliedas a 0.2 um filtered solution in Tris and NaCl.
N-terminalSequence	Phe18
MolecularWeight	54 kDa
Activity	Measuredby its ability to cleave a fluorogenic substrate, 4Methylumbelliferyl phosphate(4MUP). The specific activity is > 40000 pmoles/min/µg, as measured

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

	underthe described conditions. See Activity Assay Protocol.
Endotoxin Level	<1.0EU per 1 μg of the protein by the LAL method.
Purity	>95%,by SDSPAGE under reducing conditions and visualized by silver stain.
Storage	Do notfreeze. 3months from date of receipt, 2 to 8°C as supplied. 1 month, 2 to 8°C understerile conditions after opening.

GENE INFORMATION

Gene Name	Alpl alkaline phosphatase,liver/bone/kidney [Mus musculus]
Official Symbol	Alpl
Synonyms	Alpl; alkalinephosphatase, liver/bone/kidney; Akp2; TNAP; Akp-2; APTNAP; TNSALP; alkalinephosphatase, tissue-nonspecific isozyme; alkaline phosphatase 2, liver; EC 3.1.3.1
Gene ID	11647
mRNA Refseq	NM_007431
Protein Refseq	NP_031457
UniProt ID	P09242
Chromosome Location	4
Pathway	Endochondral Ossification;Folate biosynthesis; Metabolic pathways; TNF-alpha NF-

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

	kB Signaling Pathway
Function	alkaline phosphataseactivity; catalytic activity; hydrolase activity; metal ion binding; phosphataseactivity

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA