

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

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

SPECIFICATION

Product Overview	Recombinant Mouse Alpl protein was expressed in Murine myeloma cell line. Phe18-Gly503, with a C terminal 6 His tag.
Species	Mouse
Source	Mammalian Cells
Protein Length	18-503 a.a.
Description	Several distinct genes encode alkaline phosphatases (APs) in mice with different tissue-specific expression patterns. The Alpl gene, also known as Akp2, encodes the liver/bone/kidney isozyme, also known as the tissue non-specific AP (TNAP). The Alpl gene is a key regulator of bone mineralization in mice. A variety of mutations in the human Alpl gene leads to different forms of hypophosphatasia, characterized by poorly mineralized cartilage and bones.
Form	Supplied as a 0.2 µm filtered solution in Tris and NaCl.
N-terminal Sequence	Phe18
Molecular Weight	54 kDa
Activity	Measured by its ability to cleave a fluorogenic substrate, 4-Methylumbelliferyl phosphate (4MUP). The specific activity is > 40000 pmoles/min/µg, as measured

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	under the described conditions. See Activity Assay Protocol.
Endotoxin Level	<1.0 EU per 1 µg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE under reducing conditions and visualized by silver stain.
Storage	Do not freeze. 3 months from date of receipt, 2 to 8°C as supplied. 1 month, 2 to 8°C under sterile conditions after opening.

GENE INFORMATION

Gene Name	Alpl alkaline phosphatase, liver/bone/kidney [<i>Mus musculus</i>]
Official Symbol	Alpl
Synonyms	Alpl; alkaline phosphatase, liver/bone/kidney; Akp2; TNAP; Akp-2; APTNAP; TNSALP; alkaline phosphatase, 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-

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kB Signaling Pathway

Function

alkaline phosphataseactivity; catalytic activity; hydrolase activity; metal ion binding;
phosphataseactivity

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