

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, with a C terminal 6 His tag.
Species	Mouse
Source	Mammalian Cells
ProteinLength	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-terminalSequence	Phe18
MolecularWeight	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 <1.0EU 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 \[Mus musculus \]](#)

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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