

Product datasheet for **MR208392L4V**

Alpl (NM_007431) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Alpl (NM_007431) Mouse Tagged ORF Clone Lentiviral Particle
Symbol:	Alpl
Synonyms:	Ak; Akp; Akp-2; Akp2; ALP; APTNAP; T; TNAP; TNSALP
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_007431
ORF Size:	1575 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR208392).
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
RefSeq:	NM_007431.1
RefSeq Size:	2524 bp
RefSeq ORF:	1575 bp
Locus ID:	11647
UniProt ID:	P09242
Cytogenetics:	4 70.02 cM



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Gene Summary:

This gene encodes a preproprotein that is proteolytically cleaved to yield a signal peptide and a proprotein that is subsequently processed to generate the active mature peptide. The encoded protein is a membrane-bound glycosylated enzyme that catalyzes the hydrolysis of phosphate esters at alkaline pH. The mature peptide maintains the ratio of inorganic phosphate to inorganic pyrophosphate required for bone mineralization. Mice that lack this enzyme show symptoms of osteomalacia, softening of the bones. In humans, mutations in this gene are associated with hypophosphatasia, an inherited metabolic bone disease in which deficiency of this enzyme inhibits bone mineralization leading to skeletal defects. Mutations in the mouse gene mirror the symptoms of human hypophosphatasia. A pseudogene of this gene is present on chromosome X. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2015]