

Mouse ALPL Antibody Pair Set

Catalog No.	E-KAB-0702	Applications	ELISA
Synonyms	ALPL;AP-TNAP;APTNP;HOPS;TNAP;TNSALP;alkaline phosphatase;liver/bone/kidney;TNALP		

Kit components & Storage

Title	Specifications	Storage
Mouse ALPL Capture Antibody	1 vial, 100 µg	Store at -20°C. Avoid freeze / thaw cycles.
Mouse ALPL Detection Antibody (Biotin)	1 vial, 50 µL	Store at -20°C. Avoid freeze / thaw cycles.

Note: Centrifuge before opening to ensure complete recovery of vial contents.

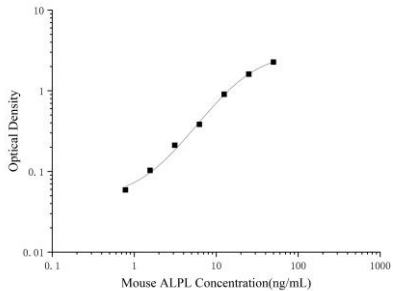
Product Information

Items		Characteristic (E-KAB-0702)	
		Mouse ALPL Capture Antibody	Mouse ALPL Detection Antibody (Biotin)
Immunogen Information	Immunogen	Recombinant Mouse ALPL protein	Recombinant Mouse ALPL protein
	Swissprot	P09242	
Product details	Reactivity	Mouse	Mouse
	Host	Rabbit	Rabbit
	Conjugation	Unconjugated	Biotin
	Concentration	0.5mg/mL	/
	Buffer	PBS with 0.04% Proclin 300, 50% glycerol, pH 7.4	PBS with 0.04% Proclin 300, 1% protective protein, 50% glycerol, pH 7.4
	Purify	Protein A & Antigen Affinity	Protein A & Antigen Affinity
	Specificity	Detects Mouse ALPL in ELISAs.	

For Research Use Only

Applications

Mouse ALPL Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images																		
ELISA Capture	0.5-4ug/mL	Mouse ALPL Capture Antibody	 <table border="1"> <caption>Approximate data points from the standard curve graph</caption> <thead> <tr> <th>Mouse ALPL Concentration (ng/mL)</th> <th>Optical Density</th> </tr> </thead> <tbody> <tr><td>0.5</td><td>0.05</td></tr> <tr><td>1</td><td>0.1</td></tr> <tr><td>2</td><td>0.2</td></tr> <tr><td>5</td><td>0.4</td></tr> <tr><td>10</td><td>0.6</td></tr> <tr><td>20</td><td>1.0</td></tr> <tr><td>50</td><td>1.5</td></tr> <tr><td>100</td><td>2.0</td></tr> </tbody> </table>	Mouse ALPL Concentration (ng/mL)	Optical Density	0.5	0.05	1	0.1	2	0.2	5	0.4	10	0.6	20	1.0	50	1.5	100	2.0
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ELISA Detection	1:1000-1:10000	Mouse ALPL Detection Antibody (Biotin)																			

Note: This standard curve is only for demonstration purposes. A standard curve should be generated for each assay!

Background

Alkaline phosphatases function physiologically as homodimers. They catalyze the hydrolysis of phosphomonoesters and release inorganic phosphate. In humans, four isoenzymes have been described: a tissue-nonspecific (TNAP) and three tissue-specific placental (PLAP), intestinal (IAP), and germ cell (GCAP). TNAP is a cell membrane-bound ecto-enzyme that releases inorganic phosphate from phosphate-enriched substrates. Also, ALPL induces the hydrolysis of extracellular inorganic pyrophosphate (PPi) which is a potent endogenous inhibitor of calcification both in vivo and in vitro. Increased activity of the enzyme alkaline phosphatase is associated with lower levels of PPi and vascular calcification present in patients with chronic kidney disease.