

Basic Information

Product Name	Anti-ALPL Antibody	
Gene Name	ALPL	
Source	Rabbit	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, ICC/IF, FCM	
Contents	500 ug/ml antibody with PBS , 0.02% NaN ₃ , 1 mg BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence of human Alkaline phosphatase/ALPL (KDPKYWRDQAQETLKYLELQ).	
concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	57KD,80KD	
Dilution Ratios	Western blot(WB): 1:500-2000 Immunohistochemistry in paraffin section (IHC): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF):1:50-400 Flow cytometry (FCM): 1-3 µg/1x10 ⁶ cells	

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

Alkaline phosphatase(ALPL) removes phosphate groups from the 5' end of DNA and RNA, and from proteins, at high pH. Most mammals have 4 different isozymes: placental, placental like, intestinal and non tissue specific(found in liver, kidney and bone). Tissues with particularly high concentrations of ALP include the liver, bile ducts, placenta, and bone. ALPL is the alkaline phosphatase of skin fibroblasts ,the tissue-nonspecific type, and that it is active toward millimolar concentrations of the putative natural substrates phosphoethanolamine(PEA) and pyridoxal-5-prime-phosphate(PLP). ALPL gene exists in single copy in the haploid genome and is composed of 12 exons distributed over more than 50 kb.Damaged or diseased tissue releases enzymes into the blood, so serum ALP measurements can be abnormal in many conditions, including bone disease and liver disease.

Selected Validation Data

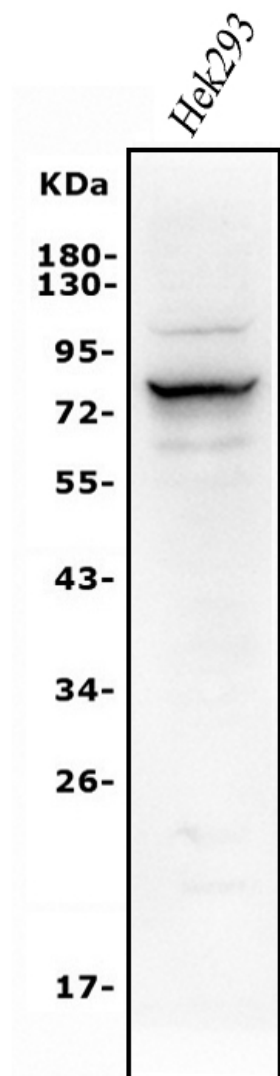


Figure 1. Western blot analysis of anti- ALPL antibody (A01008-1).The sample well of each lane was loaded with 50ug of sample under reducing conditions.Lane 1: human HEK293 whole cell lysates, Use rabbit anti- ALPL 1:1000, probed with a goat anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002). A specific band was detected for ALPL at approximately 80KD. The expected band size for ALPL is at 57KD.

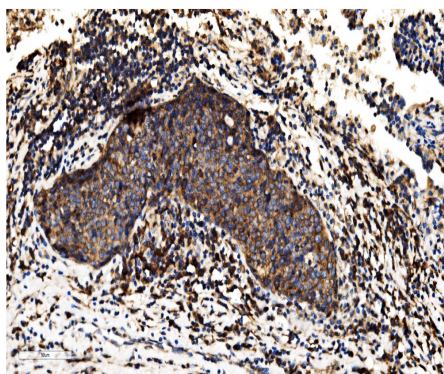


Figure 2.IHC analysis using anti- ALPL antibody (A01008-1). detected in paraffin-embedded section of human lung cancer tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

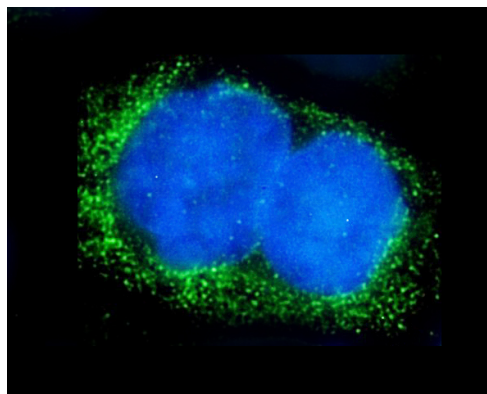


Figure 6. ICC analysis using anti- ALPL antibody (A01008-1). was detected in immersion fixed A431 cell line. Cells were stained using the Dylight488-conjugated Anti-rabbit IgG Secondary Antibody (green)(Catalog # BA1127) and counterstained with DAPI (blue).

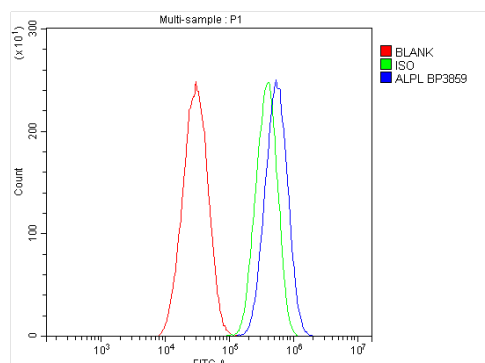


Figure 7. Flow cytometry analysis of HEPG2 cell (1x10⁶) DyLight 488 conjugated goat anti- rabbit IgG(blue) was used as secondary antibody.Isotype control antibody (Green line) was rabbit IgG DyLight 488. Unlabelled sample (Red line).