

DATASHEET

ALPL Rabbit Polyclonal Antibody

CAT. NO. APA11431

KEY FEATURES

Target	ALPL	Source / Host	Rabbit
Reactivity	Human, Rat	Clonality	Polyclonal
Applications	WB, IF/ICC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.		Storage at-20°C

BACKGROUND

Alkaline phosphatase that metabolizes various phosphate compounds and plays a key role in skeletal mineralization and adaptive thermogenesis . Has broad substrate specificity and can hydrolyze a considerable variety of compounds: however, only a few substrates, such as diphosphate (inorganic pyrophosphate; PPI), pyridoxal 5'-phosphate (PLP) and N-phosphocreatine are natural substrates . Plays an essential role in skeletal and dental mineralization via its ability to hydrolyze extracellular diphosphate, a potent mineralization inhibitor, to phosphate: it thereby promotes hydroxyapatite crystal formation and increases inorganic phosphate concentration .

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IF/ICC	1:50 - 1:200

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Description	Rabbit polyclonal antibody to ALPL
Specificity	Recognizes endogenous levels of ALPL protein.
Antibody Type	Primary antibody
Immunogen	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human ALPL. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 57 kD; Observed: 57 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	Alkaline phosphatase tissue-nonspecific isozyme; AP-TNAP; TNSALP; Alkaline phosphatase liver/bone/kidney isozyme
Gene Symbol	ALPL
Entrez Gene	249(Human); 25586(Rat)
SwissProt	P05186(Human); P08289(Rat)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

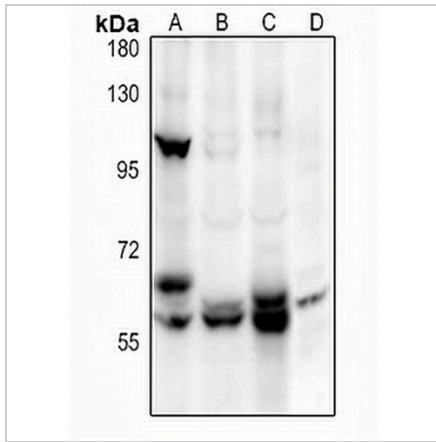
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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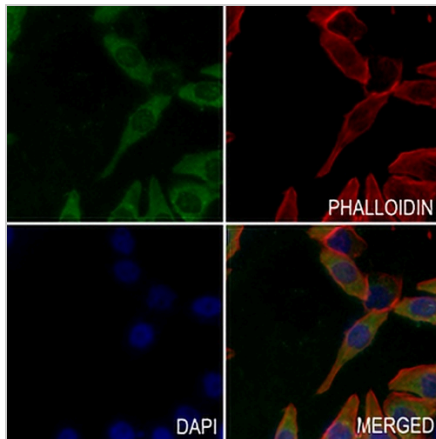
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DATA



Western blot analysis of ALPL expression in SHSY5Y (A), HEK293T (B), LO2 (C), rat lung (D) whole cell lysates. (Predicted band size: 57 kD; Observed band size: 57 kD)



Immunofluorescent analysis of ALPL staining in MCF7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a AREX® Fluor 488 -conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AREX® Fluor 594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.