Datasheet for ABIN3044314

anti-ALPL antibody (N-Term)

4 Images | 21 Publications

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Overview

Quantity:	100 µg
Target:	ALPL
Binding Specificity:	AA 21-35, N-Term
Reactivity:	Human, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This ALPL antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Purpose:	Rabbit IgG polyclonal antibody for Alkaline phosphatase, tissue-nonspecific isozyme(ALPL) detection. Tested with WB, IHC-P in Human,Mouse,Rat.
Immunogen:	A synthetic peptide corresponding to a sequence at the N-terminus of human Alkaline Phosphatase(21-35aa,EKEKDPKYWRDQAQE), different from the related rat and mouse sequences by two amino acids.
Sequence:	EKEKDPKYWR DQAQE
Isotype:	IgG
Cross-Reactivity (Details):	Predicted Cross Reactivity: mouse No cross reactivity with other proteins. Predicted Cross Reactivity: Species predicted to be fit for the product based on sequence similarities.

Product Details

Characteristics:	Rabbit IgG polyclonal antibody for Alkaline phosphatase, tissue-nonspecific isozyme(ALPL) detection. Tested with WB, IHC-P in Human,Mouse,Rat. Gene Name: alkaline phosphatase, liver/bone/kidney Protein Name: Alkaline phosphatase, tissue-nonspecific isozyme(AP-TNAP/TNSALP)
Purification:	Immunogen affinity purified.

Target Details

Target:	ALPL
Alternative Name:	ALPL (ALPL Products)
Background:	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. Synonyms: Akp2 antibody|Alkaline phosphatase intestinal antibody|Alkaline phosphatase intestinal precursor antibody|Alkaline phosphatase liver/bone/kidney antibody|Alkaline phosphatase placental antibody|Alkaline phosphatase placental like 2 antibody|Alkaline phosphatase placental like antibody|Alkaline phosphatase placental type antibody|Alkaline phosphomonoesterase antibody|ALP 1 antibody|ALP antibody|ALP I antibody|ALP L antibody|ALP P antibody|ALPG antibody|ALPI antibody|ALPL antibody|ALPP antibody|ALPPL antibody|ALPPL2 antibody|AP TNAP antibody|FLJ40094 antibody|GCAP antibody|Germ cell alkaline phosphatase antibody|Glycerophosphatase antibody|HOPS antibody|IAP antibody|Intestinal alkaline phosphatase antibody|Kasahara isozyme antibody|Nagao isozyme antibody|OTTHUMP00000164357 antibody|Placental alkaline phosphatase antibody|Placental like alkaline phosphatase antibody|PLAP 1 antibody|PLAP antibody|PLAP like antibody|Regan isozyme antibody|Testicular and thymus alkaline phosphatase antibody|Tissue non specific alkaline phosphatase antibody|Tissue nonspecific ALP antibody|TNAP antibody|TNSALP antibody

Target Details

UniProt:	P05186

Application Details

Application Notes:	WB: Concentration: 0.1-0.5 µg/mL, Tested Species: Human IHC-P: Concentration: 0.5-1 µg/mL, Tested Species: Human, Rat, Predicted Species: Mouse, Epitope Retrieval by Heat: Boiling the paraffin sections in 10 mM citrate buffer, pH 6.0, for 20 mins is required for the staining of formalin/paraffin sections. Notes: Tested Species: Species with positive results. Predicted Species: Species predicted to be fit for the product based on sequence similarities. Other applications have not been tested. Optimal dilutions should be determined by end users.
Comment:	Antibody can be supported by chemiluminescence kit ABIN921124 in WB, supported by ABIN921231 in IHC(P).
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.05 mg Thimerosal, 0.05 mg Sodium azide.
Preservative:	Thimerosal (Merthiolate), Sodium azide
Precaution of Use:	This product contains Sodium azide and Thimerosal (Merthiolate): POISONOUS AND HAZARDOUS SUBSTANCES which should be handled by trained staff only.
Handling Advice:	Avoid repeated freezing and thawing.
Storage:	4 °C/-20 °C
Storage Comment:	At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.
Expiry Date:	12 months

Publications

Product cited in:

Sun, Jiang, Chen, Xue, Mao, Ruan, Song, Mustea: "Decreasing the ratio of matriptase/HAI-1 by downregulation of matriptase as a potential adjuvant therapy in ovarian cancer." in: **Molecular medicine reports**, Vol. 14, Issue 2, pp. 1465-74, (2017) (PubMed).

Zhang, Wei, Ding, Zhang, Wang, Zhu, He, Chai, Liu: "Increased microRNA-93-5p inhibits osteogenic differentiation by targeting bone morphogenetic protein-2." in: **PLoS ONE**, Vol. 12, Issue 8, pp. e0182678, (2017) (PubMed).

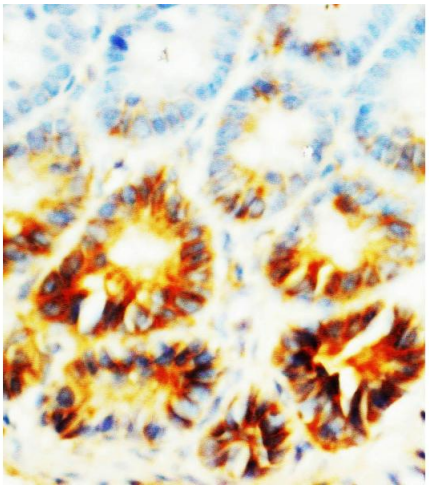
Hou, Huang, Luo, Wang, Liu, Deng, Zhang, Liu, Chen: "MiR-351 negatively regulates osteoblast differentiation of MSCs induced by (+)-cholesten-3-one through targeting VDR." in: **American journal of translational research**, Vol. 9, Issue 11, pp. 4963-4973, (2017) (PubMed).

Liu, Deng, Zhang, Zhang: "Wnt3a expression during the differentiation of adipose-derived stem cells into cholinergic neurons." in: **Neural regeneration research**, Vol. 7, Issue 19, pp. 1463-8, (2015) (PubMed).

Xu, Dong, Huang, Li, Qin, Ren, Guo, Chen, Huang: "Decreased osteoclastogenesis, osteoblastogenesis and low bone mass in a mouse model of type 2 diabetes." in: **Molecular medicine reports**, Vol. 10, Issue 4, pp. 1935-41, (2014) (PubMed).

There are more publications referencing this product on: Product page

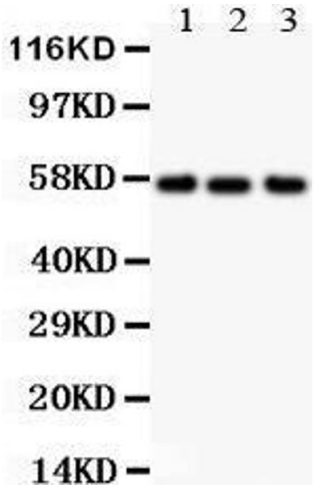
Images



Immunohistochemistry

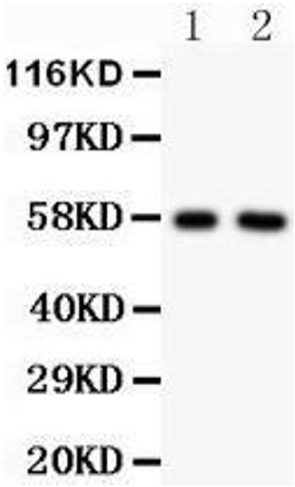
Image 1. Anti-Alkaline Phosphatase antibody, IHC(P) IHC(P): Rat Small Intestine Tissue

Images



Western Blotting

Image 2. All lanes: Anti ALPL () at 0.5ug/ml Lane 1: Human Placenta Tissue Lysate at 50ug Lane 2: Whole Cell Lysate at 40ug Lane 3: JURKAT Whole Cell Lysate at 40ug Predicted bind size: 57KD Observed bind size: 57KD



Western Blotting

Image 3. All lanes: Anti ALPL () at 0.5ug/ml Lane 1: Rat Cardiac Muscle Tissue Lysate at 50ug Lane 2: Rat Brain Tissue Lysate at 50ug Predicted bind size: 57KD Observed bind size: 57KD

Please check the product details page for more images. Overall 4 images are available for ABIN3044314.