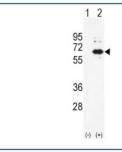


Alkaline Phosphatase Antibody / ALPL (tissue-nonspecific) (F44129)

Catalog No.	Formulation	Size
F44129-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F44129-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

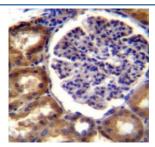
Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse
Format	Purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Purified
UniProt	P05186
Localization	Cell surface, cytoplasmic, secreted
Applications	Western Blot : 1:1000 Immunofluorescence : 1:10-1:50 Flow Cytometry : 1:10-1:50 IHC (Paraffin) : 1:10-1:50
Limitations	This Alkaline Phosphatase antibody is available for research use only.

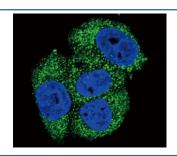


Western blot analysis of Alkaline Phosphatase antibody and 293 cell lysate (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (2) with the ALPL gene. Predicted molecular weight ~57 kDa, but can be observed at up to ~75 kDa due to

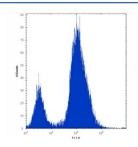
glycosylation.



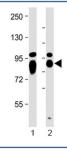
Alkaline Phosphatase antibody immunohistochemistry analysis in formalin fixed and paraffin embedded human kidney tissue.



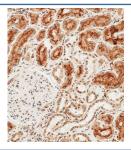
Confocal immunofluorescent analysis of Alkaline Phosphatase antibody with MCF-7 cells followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). DAPI was used as a nuclear counterstain (blue).



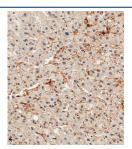
Alkaline Phosphatase antibody flow cytometric analysis of 293 cells (right histogram) compared to a negative control (left histogram). FITC-conjugated goat-anti-rabbit secondary Ab was used for the analysis.



Western blot testing of 1) human HeLa and 2) mouse F9 cell lysate with Alkaline Phosphatase antibody at 1:2000. Predicted molecular weight ~57 kDa, but can be observed at up to ~75 kDa due to glycosylation.



IHC staining of FFPE human kidney tissue with Alkaline Phosphatase antibody. HIER: steam section in pH9 EDTA buffer for 20 min and allow to cool prior to staining.



IHC staining of FFPE human kidney tissue with Alkaline Phosphatase antibody. HIER: steam section in pH9 EDTA buffer for 20 min and allow to cool prior to staining.

There are at least four distinct but related alkaline phosphatases: intestinal, placental, placental-like, and liver/bone/kidney (tissue non-specific). The genes for the first three are located together on chromosome 2 while the tissue non-specific form is located on chromosome 1. This protein is a membrane bound glycosylated enzyme that is not expressed in any particular tissue and is, therefore, referred to as the tissue-nonspecific form of the enzyme. The exact physiological function of the alkaline phosphatases is not known. A proposed function of this form of the enzyme is matrix mineralization, however, mice that lack a functional form of this enzyme show normal skeletal development. This enzyme has been linked directly to a disorder known as hypophosphatasia, a disorder that is characterized by hypercalcemia and includes skeletal defects. The character of this disorder can vary, however, depending on the specific mutation since this determines age of onset and severity of symptoms.

Application Notes

Titration of the Alkaline Phosphatase antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 217-246 from human ALPL was used as the immunogen for this tissue-nonspecific Alkaline Phosphatase antibody.

Storage

Aliquot the Alkaline Phosphatase antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.