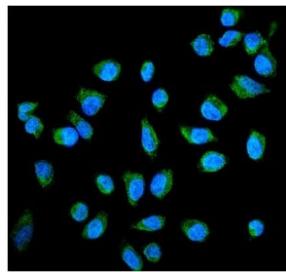


PLAP Antibody / Placental alkaline phosphatase (R32610)

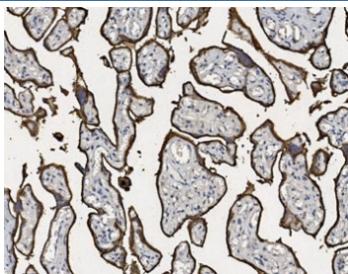
Catalog No.	Formulation	Size
R32610	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	P05187
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Immunofluorescence : 5ug/ml Flow Cytometry : 1-3ug/million cells
Limitations	This PLAP antibody is available for research use only.



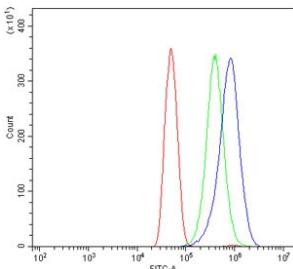
Immunofluorescent staining of FFPE human HeLa cells with PLAP antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



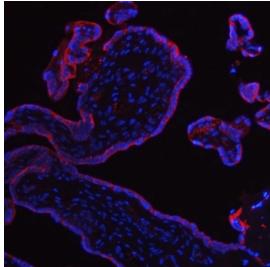
IHC testing of FFPE human placental tissue with PLAP antibody. HIER: steam section in pH8 EDTA buffer for 20 min.



Western blot testing of human placenta lysate with PLAP antibody. Predicted molecular weight ~58 kDa but routinely visualized at 60-70 kDa.



Flow cytometry testing of human SiHa cells with PLAP antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= PLAP antibody.



Immunofluorescent staining of FFPE human placental tissue with PLAP antibody (red) and DAPI nuclear stain (blue). HIER: steam section in pH8 EDTA buffer for 20 min.

Description

Alkaline phosphatase, placental type also known as placental alkaline phosphatase (PLAP) is an allosteric enzyme that in humans is encoded by the ALPP gene. The protein encoded by this gene is an alkaline phosphatase, a metalloenzyme that catalyzes the hydrolysis of phosphoric acid monoesters. It belongs to a multigene family composed of four alkaline phosphatase isoenzymes. The enzyme functions as a homodimer and has a catalytic site containing one magnesium and two zinc ions, which are required for its enzymatic function. The protein is primarily expressed in placental and endometrial tissue; however, strong ectopic expression has been detected in ovarian adenocarcinoma, serous cystadenocarcinoma, and other ovarian cancer cells.

Application Notes

Optimal dilution of the PLAP antibody should be determined by the researcher.

Immunogen

Amino acids 403-433 (KARDRKAYTVLLYGNPGYVLKDGPARDVTE-human) were used as the immunogen for the PLAP antibody.

Storage

After reconstitution, the PLAP antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.