

PLAP Monoclonal Antibody

Catalog No :	YM0522
Reactivity :	Human
Applications :	WB;IHC;IF;ELISA
Target :	PLAP
Fields :	>>Thiamine metabolism;>>Folate biosynthesis;>>Metabolic pathways;>>Biosynthesis of cofactors
Gene Name :	ALPP
Protein Name :	Alkaline phosphatase, placental type
Human Gene Id :	250
Human Swiss Prot No :	P05187
Immunogen :	Purified recombinant fragment of human PLAP expressed in E. Coli.
Specificity :	PLAP Monoclonal Antibody detects endogenous levels of PLAP protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	WB 1:500 - 1:2000. IHC 1:200 - 1:1000. ELISA: 1:10000.. IF 1:50-200
Purification :	Affinity purification
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Molecularweight :	58kD
Cell Pathway :	Folate biosynthesis;

P References :

1. J Cell Biochem. 2003 Apr 1;88(5):1025-37.
2. J Mol Biol. 2005 Jul 15;350(3):441-51.

Background :

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. [provided by RefSeq, Jan 2015],

Function :

catalytic activity:A phosphate monoester + H(2)O = an alcohol + phosphate.,cofactor: Binds 1 magnesium ion.,cofactor: Binds 2 zinc ions.,miscellaneous: In most mammals there are four different isozymes: placental, placental-like, intestinal and tissue non-specific (liver/bone/kidney).,online information: Alkaline phosphatase entry,polymorphism: Placental ALP is highly polymorphic, there are at least three common alleles.,similarity: Belongs to the alkaline phosphatase family.,subunit: Homodimer.,

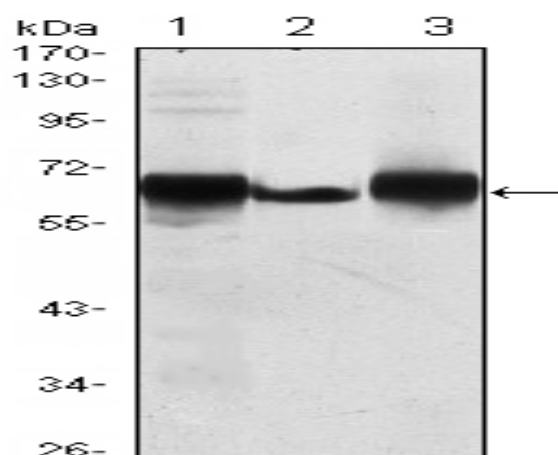
Subcellular Location :

Cell membrane; Lipid-anchor, GPI-anchor .

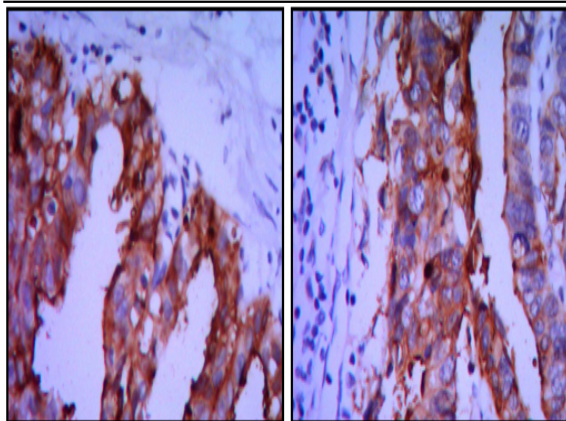
Expression :

Detected in placenta (at protein level).

Products Images



Western Blot analysis using PLAP Monoclonal Antibody against HepG2 (1), A431 (2) and MCF-7 (3) cell lysate.



A

B

Immunohistochemistry analysis of paraffin-embedded ovarian cancer (A), stomach cancer (B) with DAB staining using PLAP Monoclonal Antibody.