

Product Name: KO-Validated Placental Alkaline Phosphatase (PLAP) Recombinant Rabbit Monoclonal Antibody

Catalog #: KVA00058

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 58.0kDa

Antigen Information

Gene Name	ALPP ALPP; Alkaline Phosphatase, Placental; PLAP; PALP; Alkaline Phosphatase, Placental Type; Alkaline Phosphatase Regan Isozyme; Placental Alkaline Phosphatase 1; EC 3.1.3.1; PLAP-1;
Alternative Names	Alkaline Phosphatase, Placental (Regan Isozyme); Intestinal-Type Alkaline Phosphatase; Intestinal Alkaline Phosphatase; Placental Alkaline Phosphatase; Alkaline Phosphomonoesterase; Glycerophosphatase; Regan Isozyme; ALPI; ALP; IAP
Gene ID	250.0
SwissProt ID	P05187
Immunogen	A synthesized peptide derived from human Placental alkaline phosphatase (PLAP)

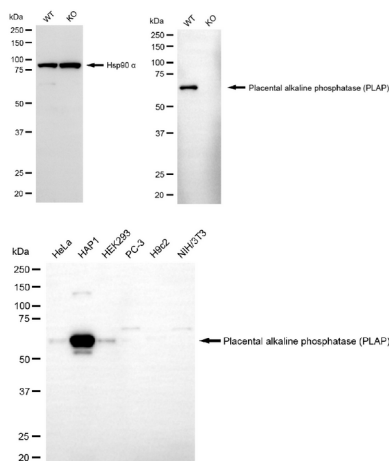
Background

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. One of the main sources of this enzyme is the liver, and thus, it's one of several indicators of liver injury in different clinical conditions. In pregnant women, this 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, Aug 2020]

Research Area

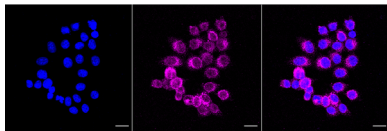
Cell Biology, Tags & Cell Markers, Cancer

Image Data

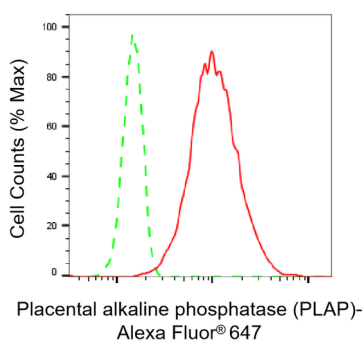


Western blotting analysis using placental alkaline phosphatase (PLAP) antibody (KVA00058). Placental alkaline phosphatase (PLAP) expression in wild type (WT) and ALPP knockout (KO) HSHC cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with placental alkaline phosphatase (PLAP) antibody (KVA00058, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.

Western blotting analysis using placental alkaline phosphatase (PLAP) antibody (KVA00058). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with placental alkaline phosphatase (PLAP) antibody (KVA00058, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HepG2 cells with Placental alkaline phosphatase (PLAP) antibody (KVA00058, 1:1,000). Nuclei were stained blue with DAPI; Placental alkaline phosphatase (PLAP) was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser intensity and smart gain: Medium. Scale bar, 20 µm.



Flow cytometric analysis of Placental alkaline phosphatase (PLAP) expression in HepG2 cells using Placental alkaline phosphatase (PLAP) antibody (KVA00058, 1:2,000). Green, isotype control; red, Placental alkaline phosphatase (PLAP).