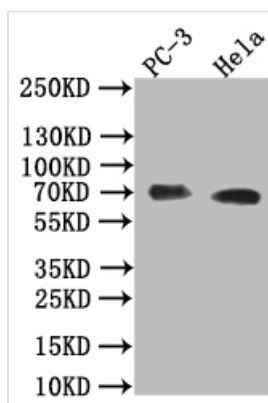




ALPP Recombinant Monoclonal Antibody

Product Code	CSB-RA183247A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P05187
Immunogen	A synthesized peptide derived from Human ALPP
Species Reactivity	Human
Tested Applications	ELISA, WB, IHC, FC; Recommended dilution: WB:1:500-1:2000, IHC:1:50-1:200, FC:1:50-1:200
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Tags & Cell Markers?Immunology
Gene Names	ALPP
Clone No.	5B9

Image



Western Blot

Positive WB detected in: PC-3 whole cell lysate, HeLa whole cell lysate

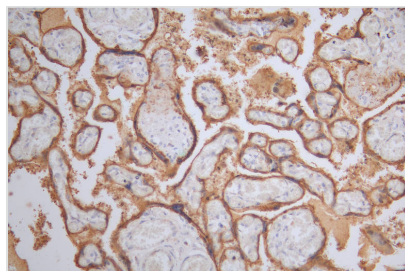
All lanes: Placental alkaline phosphatase (PLAP) antibody at 1:1000

Secondary

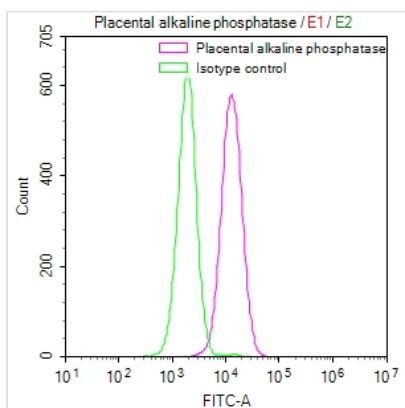
Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 70 kDa

Observed band size: 70 kDa



IHC image of CSB-RA183247A0HU diluted at 1:50 and staining in paraffin-embedded human placenta tissue performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit polymer IgG labeled by HRP and visualized using 0.39% DAB.



Overlay Peak curve showing HepG2 cells surface stained with CSB-RA183247A0HU (red line) at 1:50. Then 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (1µg/1*10⁶cells) for 45min at 4°C. The secondary antibody used was FITC-conjugated Goat Anti-rabbit IgG(H+L) at 1:200 dilution for 35min at 4°C. Control antibody (green line) was rabbit IgG (1µg/1*10⁶cells) used under the same conditions. Acquisition of >10,000 events was performed.

Description

The production of the ALPP recombinant monoclonal antibody is a meticulously coordinated process. It initiates with in vitro cloning, where genes for both the heavy and light chains of the ALPP antibody are seamlessly integrated into expression vectors. Subsequently, these vectors are introduced into host cells, enabling the recombinant antibody's expression within a cell culture context. Following expression, the ALPP recombinant monoclonal antibody is carefully purified from the supernatant of transfected host cell lines, making use of the precision of affinity chromatography. A salient feature of this antibody is its specific binding to the human ALPP protein. Moreover, its versatility is evident, as it is well-suited for a wide array of applications, including ELISA and FC.

The main role of the ALPP protein is to catalyze the hydrolysis of phosphate esters in an alkaline environment. ALPP is commonly found in various tissues, including the placenta, liver, bone, and kidney. In the placenta, ALPP plays a crucial role in nutrient transport and metabolism during pregnancy. In bone tissue, it is involved in mineralization processes. In clinical settings, the measurement of ALPP levels is used as a diagnostic marker for various medical conditions, including liver disease and certain bone disorders.