

# PLAP (Clone EP194)

## Rabbit Monoclonal Antibody

**Specificity:** Human. Others not tested

**Immunogen:** Synthetic peptide corresponding to a region within the extracellular domain of Human Placental alkaline phosphatase (PLAP)

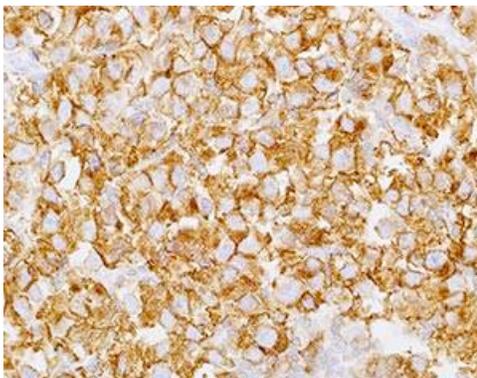
**Ig Class:** Rabbit IgG

**Storage:** Store vial at 4°C. When stored at 2-8°C, this antibody is stable for 24 months

**Staining procedures:** Use formalin-fixed and paraffin-embedded sections. *Retrieval conditions:* Pretreatment of deparaffinized tissue with heat-induced epitope retrieval is recommended. *Detection methods:* Polymer anti-mouse/rabbit Ig detection system. *Working dilution:* 1:50-100; *Positive Control:* Placenta or seminoma. *Cellular Localization:* Membrane. *Intended Use:* In vitro diagnosis (IVD).

**Description:** Alkaline phosphatases (ALP) are dimeric enzymes by glycosylphosphatidylinositol anchors to the cell membrane. There are at least four distinct but related isozymes: placenta ALP (PLAP), germ cell ALP (PLAP-like or GCAP), intestinal ALP (IAP) and non-specific tissue ALP (TNAP). These isozymes may serve to guide migratory cells, to transport specific molecules such as fat and immunoglobulins across membranes or to detoxify lipopolysaccharide and prevent bacterial invasion across the gut mucosal barrier. This antibody specifically recognizes PLAP and GCAP. PLAP is expressed in the human placenta beginning late in the first trimester of pregnancy. GCAP is expressed in normal endocervix and fallopian tube. Ectopic expression of GCAP is associated with germ cell tumors: intratubular germ cell neoplasia, unclassified (IGCNU), seminoma, embryonal carcinoma and choriocarcinoma. PLAP has been used as a marker for germ cell tumor. Clinically, it is useful for the identification of primary intracranial germinoma.

**Supplied As:** Purified antibody with 0.2% BSA and 15mM sodium azide.



### References:

1. Fishman L, et al. *Cancer Res.* 1976; 36:2268-73.
2. Stingham ST, et al. *J Biomed Biotechnol.* 2006; 56087:1-8.
3. Jacobsen GK, et al. *Acta Pathol Microbiol Immunol Scand A.* 1984; 92:323-9.

*Formalin-fixed, paraffin-embedded human seminoma stained with anti-PLAP antibody using peroxidase-conjugate and DAB chromogen. Note the membrane staining of tumor cells*

**Cat. #Z2509 (1.0 ml)**