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#8681

## ALPP (3E5C7) Mouse mAb

**For Research Use Only. Not for Use in Diagnostic Procedures.**

<b>Applications:</b> W	<b>Reactivity:</b> H	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 70	<b>Source/Isotype:</b> Mouse IgG2b	<b>UniProt ID:</b> #P05187	<b>Entrez-Gene Id:</b> 250
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### Product Usage Information

#### Application

Western Blotting

#### Dilution

1:1000

### Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

### Specificity/Sensitivity

ALPP (3E5C7) Mouse mAb recognizes endogenous levels of total ALPP protein. This antibody may cross-react with a protein of unknown origin at ~140 kDa in some cell lines.

### Source / Purification

Monoclonal antibody is produced by immunizing animals with a recombinant protein fragment specific to human ALPP protein.

### Background

Mammalian alkaline phosphatases (ALPs) are highly conserved zinc-containing allosteric enzymes that hydrolyze and transphosphorylate a wide range of compounds (1). There are four known human alkaline phosphatase isozymes: ALPL (tissue-nonspecific; bone/liver/kidney), ALPP (placental), ALPPL2 (germ cell), and ALPI (intestinal) (2). Placental alkaline phosphatase (ALPP) is bound to the plasma membrane via a glycosyl-phosphatidylinositol (GPI) anchor (3). It is expressed primarily in the placenta (4) and may be involved in transplacental IgG transport (5). ALPP has been found to be overexpressed on the surface of several different types of solid tumor cells (6), and elevated serum concentrations of ALPP and ALPP-like enzymes has been found to be associated with ovarian, cervical, and testicular cancer (7).

### Background References

1. Hoylaerts, M.F. et al. (1997) *J Biol Chem* 272, 22781-7.
2. Millán, J.L. (2006) *Purinergic Signal* 2, 335-41.
3. Low, M.G. and Saltiel, A.R. (1988) *Science* 239, 268-75.
4. Beckman, G. et al. *Hum Hered* 45, 1-5.
5. Fishman, L. et al. (1976) *Cancer Res* 36, 2268-73.
6. Ind, T. et al. (1997) *Br J Obstet Gynaecol* 104, 1024-9.
7. Koshida, K. et al. (1996) *Br J Urol* 77, 138-42.

### Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

### Western Blot Buffer

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

### Applications Key

**W:** Western Blotting

### Cross-Reactivity Key

**H:** Human

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