

Placental Alkaline Phosphatase Antibody / ALPP / PLAP [clone PL8-F6] (V2519)

| Catalog No. | Formulation | Size |
|----------------|--|--------|
| V2519-100UG | 0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide | 100 ug |
| V2519-20UG | 0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide | 20 |
| V2519SAF-100UG | 1 mg/ml in 1X PBS; BSA free, sodium azide free | 100 |

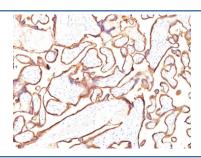
Citations (4)

Bulk quote request

| Availability | 1-3 business days |
|--------------------|--|
| Species Reactivity | Human |
| Format | Purified |
| Clonality | Monoclonal (mouse origin) |
| Isotype | Mouse IgG2b, kappa |
| Clone Name | PL8-F6 |
| Purity | Protein G affinity chromatography |
| UniProt | P05187 |
| Localization | Cytoplasmic and cell surface |
| Applications | Flow Cytometry: 1-2ug/million cells Immunofluorescence: 1-3ug/ml Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT Western Blot: 2-4ug/ml |
| Limitations | This Placental Alkaline Phosphatase antibody is available for research use only. |



Western blot testing of human JEG-3 cell lysate with Placental Alkaline Phosphatase antibody (clone PL8-F6). Predicted molecular weight ~58 kDa but routinely visualized at 60-70 kDa.



IHC: Formalin-fixed, paraffin-embedded human placental tissue stained with Placental Alkaline Phosphatase antibody (clone PL8-F6). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.

Description

Placental Alkaline Phosphatase antibody clone PL8-F6 is a monoclonal antibody specific for placental alkaline phosphatase (PLAP), a membrane-bound isoenzyme of alkaline phosphatase encoded by the ALPP gene. PLAP is normally expressed in placental trophoblasts during pregnancy, but it is also aberrantly expressed in a variety of malignancies, including germ cell tumors, ovarian carcinoma, and some gastrointestinal cancers. Because of its restricted normal expression and consistent elevation in tumors, PLAP serves as both a diagnostic marker and a subject of cancer biology research. NSJ Bioreagents provides Placental Alkaline Phosphatase antibody clone PL8-F6 for studies in oncology, developmental biology, and reproductive medicine.

The antibody produces strong membranous and cytoplasmic staining in placental tissue, reflecting the enzyme's physiological role in pregnancy. In pathology, it is widely used to detect PLAP expression in testicular germ cell tumors, particularly seminomas and embryonal carcinomas. Pathologists include it in diagnostic panels to differentiate germ cell neoplasms from non-germ cell tumors, where PLAP expression is absent.

In oncology, the antibody has been employed to explore PLAP's role as a tumor-associated antigen. Its detection has aided in identifying ovarian, endometrial, and gastrointestinal tumors, as well as certain lung cancers. Elevated PLAP levels in serum and tissue have been associated with tumor progression, making this antibody valuable in both research and diagnostic settings.

Beyond cancer, Placental Alkaline Phosphatase antibody clone PL8-F6 supports reproductive and developmental research. PLAP expression in trophoblasts highlights its role in placental function, where it contributes to nutrient transport and immunomodulation at the maternal-fetal interface. Researchers studying placental development and disorders such as preeclampsia rely on this antibody to track PLAP distribution.

The antibody is validated for use in tissue-based and cell-based assays, consistently producing reproducible staining patterns. Its strong performance across applications has established it as a reliable marker in reproductive and oncologic studies. Alternate names include PLAP antibody, ALPP antibody, placental isoenzyme antibody, and trophoblast marker antibody.

Application Notes

Optimal dilution of the Placental Alkaline Phosphatase antibody should be determined by the researcher.

Immunogen

Purified human PLAP protein was used as the immunogen for the Placental Alkaline Phosphatase antibody.

Storage

Store the Placental Alkaline Phosphatase antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).