

# **PLAGL1 Antibody**

Purified Mouse Monoclonal Antibody Catalog # AO1833a

#### **Specification**

#### **PLAGL1 Antibody - Product Information**

Application E, WB, IHC
Primary Accession Q9UM63
Reactivity Human
Host Mouse
Clonality Monoclonal
Isotype IgG1

Calculated MW 50.8kDa KDa

**Description** 

This gene encodes a C2H2 zinc finger protein with transactivation and DNA-binding activities. It has been shown to have anti-proliferative properties, and thus thought to function as a tumor suppressor. In addition, overexpression of this gene during fetal development is believed to underlie the rare disorder, transient neonatal diabetes mellitus (TNDM). This gene is imprinted, with preferential expression of the paternal allele in many tissues, however, biallelic expression has been noted in peripheral blood leucocytes. A recent study reports that tissue-specific imprinting results from variable utilization of monoallelic and biallelic promoters. Many transcript variants differing in the 5' UTR and encoding two different isoforms, have been found for this gene.

## **Immunogen**

Purified recombinant fragment of human PLAGL1 (AA: 118-222) expressed in E. Coli.

### **Formulation**

Purified antibody in PBS with 0.05% sodium azide

#### **PLAGL1 Antibody - Additional Information**

**Gene ID** 5325

#### **Other Names**

Zinc finger protein PLAGL1, Lost on transformation 1, LOT-1, Pleiomorphic adenoma-like protein 1, Tumor suppressor ZAC, PLAGL1, LOT1, ZAC

# **Dilution**

E~~1/10000 WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000

#### **Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

PLAGL1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.



### **PLAGL1 Antibody - Protein Information**

#### Name PLAGL1

Synonyms LOT1, ZAC

### **Function**

Acts as a transcriptional activator (PubMed:<a href="http://www.uniprot.org/citations/9722527" target="\_blank">9722527</a>). Involved in the transcriptional regulation of type 1 receptor for pituitary adenylate cyclase-activating polypeptide.

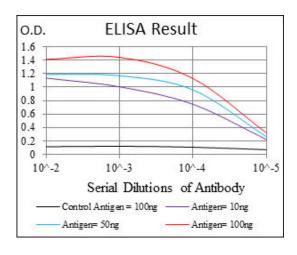
# **Cellular Location**

**Nucleus** 

### **PLAGL1 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture





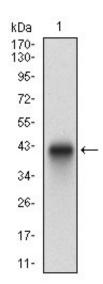


Figure 1: Western blot analysis using PLAGL1 mAb against human PLAGL1 recombinant protein. (Expected MW is 37.5 kDa)

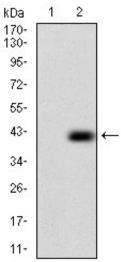


Figure 2: Western blot analysis using PLAGL1 mAb against HEK293 (1) and PLAGL1 (AA: 118-222)-hlgGFc transfected HEK293 (2) cell lysate.

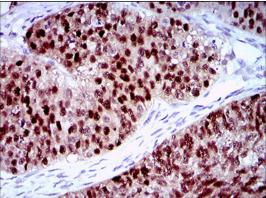
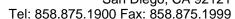


Figure 3: Immunohistochemical analysis of paraffin-embedded ovarian cancer tissues using PLAGL1 mouse mAb with DAB staining.

# **PLAGL1 Antibody - Background**

The protein encoded by this gene associates with class II major histocompatibility complex (MHC)







and is an important chaperone that regulates antigen presentation for immune response. It also serves as cell surface receptor for the cytokine macrophage migration inhibitory factor (MIF) which, when bound to the encoded protein, initiates survival pathways and cell proliferation. This protein also interacts with amyloid precursor protein (APP) and suppresses the production of amyloid beta (Abeta). Multiple alternatively spliced transcript variants encoding different isoforms have been identified.;

# **PLAGL1 Antibody - References**

1. J Biomed Sci. 2012 Nov 15;19:95. 2. Exp Cell Res. 2011 Dec 10;317(20):2925-37.