

#### **PLIN2 Antibody**

Purified Mouse Monoclonal Antibody Catalog # AO1838a

### **Specification**

### **PLIN2 Antibody - Product Information**

Application WB, IHC, E
Primary Accession Q99541
Reactivity Human
Host Mouse
Clonality Monoclonal
Isotype IgG1
Calculated MW 48kDa KDa

**Description** 

The protein encoded by this gene belongs to the perilipin family, members of which coat intracellular lipid storage droplets. This protein is associated with the lipid globule surface membrane material, and maybe involved in development and maintenance of adipose tissue. However, it is not restricted to adipocytes as previously thought, but is found in a wide range of cultured cell lines, including fibroblasts, endothelial and epithelial cells, and tissues, such as lactating mammary gland, adrenal cortex, Sertoli and Leydig cells, and hepatocytes in alcoholic liver cirrhosis, suggesting that it may serve as a marker of lipid accumulation in diverse cell types and diseases. Alternatively spliced transcript variants have been found for this gene.

### **Immunogen**

Purified recombinant fragment of human PLIN2 (AA: 286-437) expressed in E. Coli.

#### **Formulation**

Purified antibody in PBS with 0.05% sodium azide

## **PLIN2 Antibody - Additional Information**

#### Gene ID 123

#### **Other Names**

Perilipin-2, Adipophilin, Adipose differentiation-related protein, ADRP, PLIN2, ADFP

#### **Dilution**

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

## **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**

PLIN2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.



# **PLIN2 Antibody - Protein Information**

Name PLIN2 (HGNC:248)

**Synonyms ADFP** 

#### **Function**

Structural component of lipid droplets, which is required for the formation and maintenance of lipid storage droplets.

### **Cellular Location**

Membrane {ECO:0000250|UniProtKB:P43883}; Peripheral membrane protein {ECO:0000250|UniProtKB:P43883}. Lipid droplet

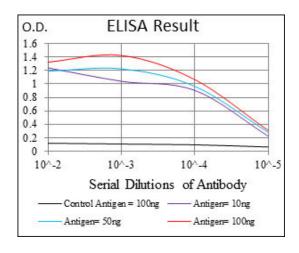
# **Tissue Location**

Milk lipid globules..

# **PLIN2 Antibody - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture





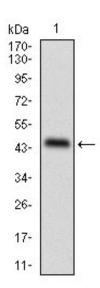


Figure 1: Western blot analysis using PLIN2 mAb against human PLIN2 recombinant protein. (Expected MW is 42.6 kDa)

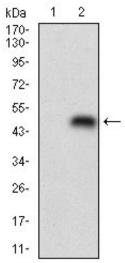


Figure 2: Western blot analysis using PLIN2 mAb against HEK293 (1) and PLIN2 (AA: 286-437)-hlgGFc transfected HEK293 (2) cell lysate.

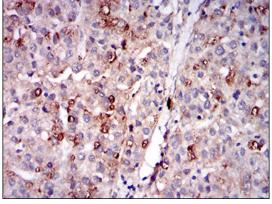


Figure 3: Immunohistochemical analysis of paraffin-embedded liver cancer tissues using PLIN2 mouse mAb with DAB staining.



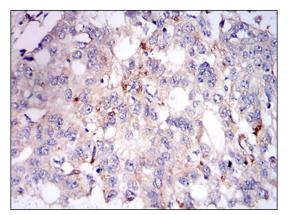


Figure 4: Immunohistochemical analysis of paraffin-embedded esophageal cancer tissues using PLIN2 mouse mAb with DAB staining.

# **PLIN2 Antibody - Background**

This gene is a member of the caudal-related homeobox transcription factor gene family. The encoded DNA-binding protein regulates intestine-specific gene expression and enterocyte differentiation. It has been shown to induce expression of the intestinal alkaline phosphatase gene, and inhibit beta-catenin/T-cell factor transcriptional activity.;

# **PLIN2 Antibody - References**

1. Am J Physiol Endocrinol Metab. 2012 Nov 1;303(9):E1158-65. 2. Exp Physiol. 2012 Aug;97(8):970-80.