10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PLIN2 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1881a

Specification

PLIN2 Antibody - Product Information

Application	**E, WB, IF, FC, IHC**
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
E~~1/10000
WB~~1/500 - 1/2000
IF~~1/200 - 1/1000
FC~~1/200 - 1/400
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
PLIN2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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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.

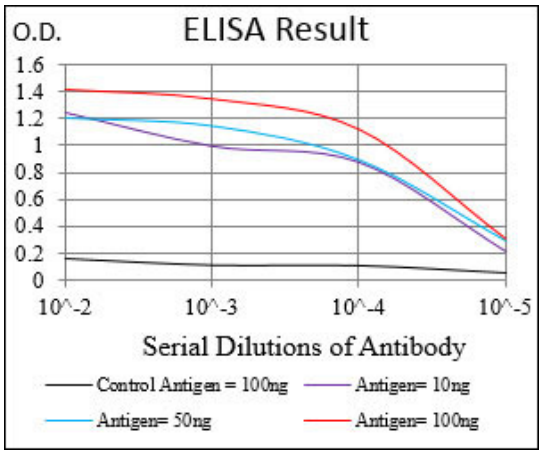
Cellular Location
Membrane {ECO:0000250|UniProtKB:P43883}; Peripheral membrane protein {ECO:0000250|UniProtKB:P43883}. Lipid droplet

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
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture



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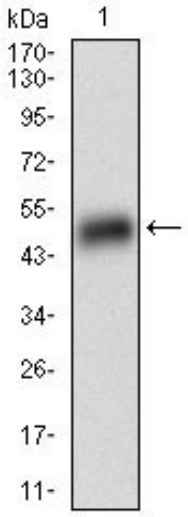

Figure 1: Western blot analysis using PLIN2 mAb against human PLIN2 (AA: 286-437) recombinant protein. (Expected MW is 42.6 kDa)

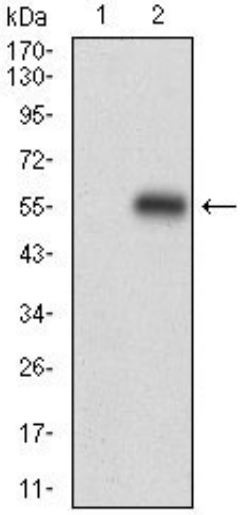

Figure 2: Western blot analysis using PLIN2 mAb against HEK293 (1) and PLIN2 (AA: 286-437)-hIgGFc transfected HEK293 (2) cell lysate.

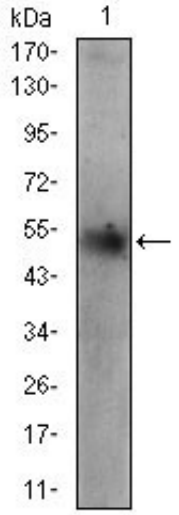

Figure 3: Western blot analysis using PLIN2 mouse mAb against HepG2 cell lysate.

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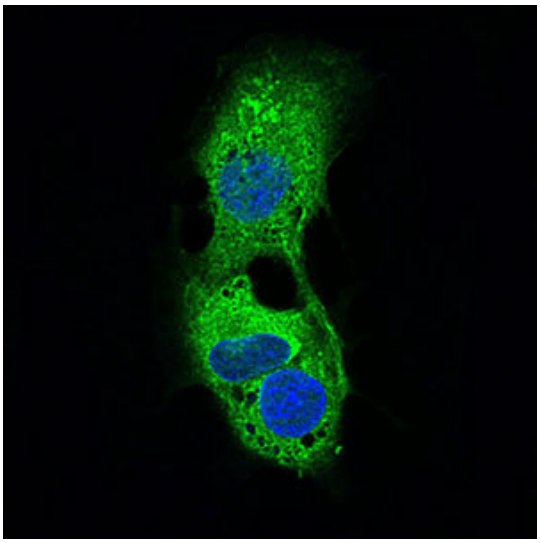

Figure 4: Immunofluorescence analysis of HepG2 cells using PLIN2 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Secondary antibody from Fisher (Cat#: 35503)

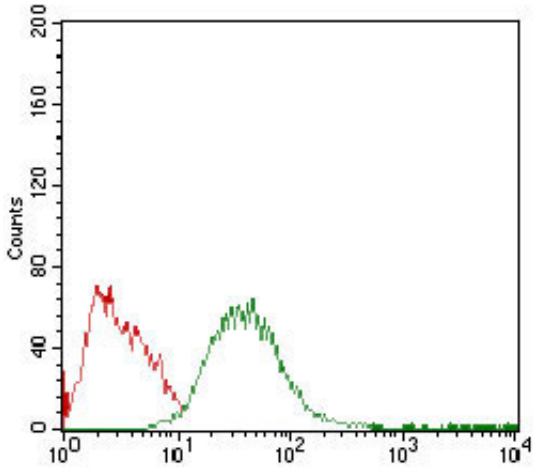

Figure 5: Flow cytometric analysis of HepG2 cells using PLIN2 mouse mAb (green) and negative control (red).

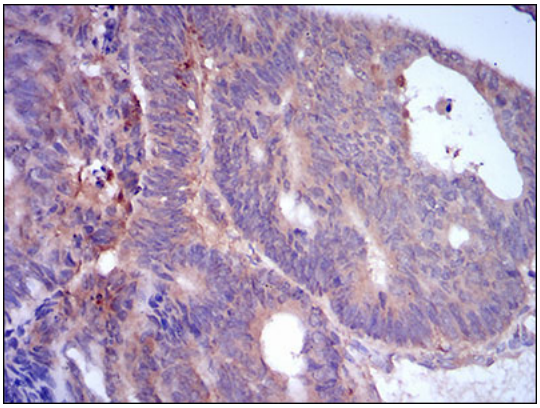

Figure 6: Immunohistochemical analysis of paraffin-embedded rectum cancer tissues using PLIN2 mouse mAb with DAB staining.

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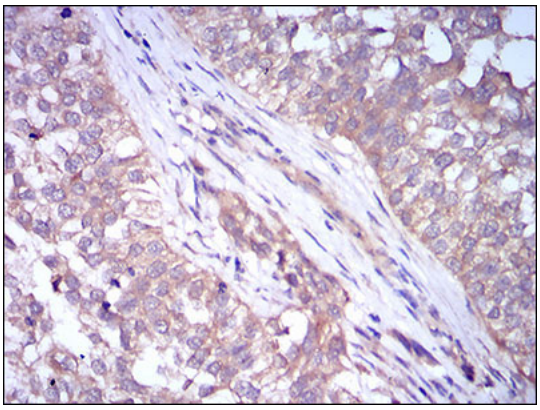

Figure 7: Immunohistochemical analysis of paraffin-embedded bladder cancer tissues using PLIN2 mouse mAb with DAB staining.

PLIN2 Antibody - Background

This gene is a member of the caudal-related homeobox transcription factor gene family. The encoded protein is a major regulator of intestine-specific genes involved in cell growth an differentiation. This protein also plays a role in early embryonic development of the intestinal tract. Aberrant expression of this gene is associated with intestinal inflammation and tumorigenesis. ;

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.