

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Perilipin-2 in direct ELISAs.
Source	Monoclonal Mouse IgG ₁ Clone # 788616
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Perilipin-2 Met1-His437 Accession # Q99541
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

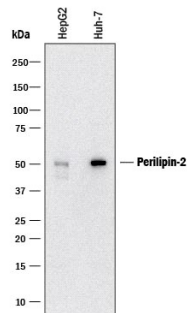
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Immunocytochemistry	8-25 µg/mL	See Below
Immunohistochemistry	5-25 µg/mL	See Below

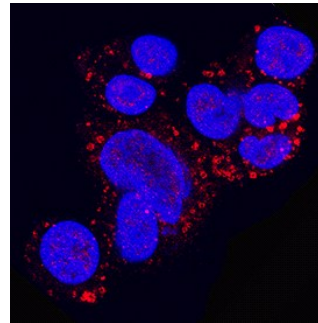
DATA

Western Blot



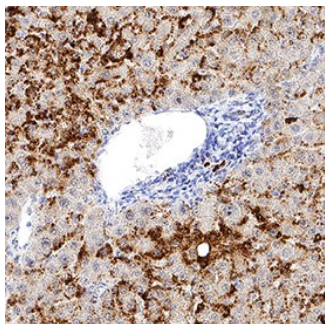
Detection of Human Perilipin-2 by Western Blot. Western blot shows lysates of HepG2 human hepatocellular carcinoma cell line and Huh-7 human hepatoma cell line. PVDF membrane was probed with 1 µg/mL of Mouse Anti-Human Perilipin-2 Monoclonal Antibody (Catalog # MAB76341) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for Perilipin-2 at approximately 55 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunocytochemistry



Perilipin-2 in HepG2 Human Cell Line. Perilipin-2 was detected in immersion fixed HepG2 human hepatocellular carcinoma cell line using Mouse Anti-Human Perilipin-2 Monoclonal Antibody (Catalog # MAB76341) at 8 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

Immunohistochemistry



Perilipin-2 in Human Liver. Perilipin-2 was detected in immersion fixed paraffin-embedded sections of human liver using Mouse Anti-Human Perilipin-2 Monoclonal Antibody (Catalog # MAB76341) at 5 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC001). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm in hepatocytes. View our protocol for [IHC Staining with VisUCyte HRP Polymer Detection Reagents](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Perilipin-2 (PLIN2), also known as Adipophilin (ADFP) and Adipose Differentiation-Related Protein (ADRP), is a widely expressed 52 kDa acylated protein that associates with membranes and cytoplasmic lipid droplets. It is upregulated during adipocyte differentiation and is a major component of milk fat globules. Perilipin-2 promotes the cellular uptake and accumulation of long chain fatty acids and regulates the intracellular distribution of phospholipids. It promotes hepatic insulin resistance in response to a high fat diet. Human Perilipin-2 shares 82% and 79% aa sequence identity with mouse and rat Perilipin-2, respectively.