Product datasheet

anti-Perilipin 2 (N-terminus) mouse monoclonal, AP125, liquid, purified

Short overview

Cat. No.	690102
Quantity	1 ml
Concentration	50 µg/ml (50 µg)

Product description

Host	Mouse
Antibody Type	Monoclonal
Isotype	IgG1
Clone	AP125
Immunogen	Synthetic peptide (aa 5-27 from N-terminus of human adipophilin/PLIN2)
Formulation	PBS buffer, pH 7.4 with 0.09% sodium azide and 0.5 % BSA
UniprotID	A0A5F4CRI5 (Dog, Canis familiaris), Q99541 (Human), Q5U2U5 (Rat)
Synomym	Perilipin-2, Adipophilin, Adipose differentiation-related protein, ADRP, PLIN2, ADFP
Conjugate	Unconjugated
Purification	Affinity chromatography
Storage	Short term at 2-8°C; long term storage in aliquots at -20°C; avoid freeze/thaw cycles
Intended use	Research use only
Application	IHC, WB
Reactivity	Dog, Human, Rat
No reactivity	Bovine

Applications

Immunohistochemistry (IHC) - frozen	1:10-1:100 (0.5-5 µg/ml)
Immunohistochemistry (IHC) - paraffin	1:10-1:100 (0.5-5 µg/ml; microwave treatment recommended)
Western Blot (WB)	1:50-1:100 (0.5-1 µg/ml)

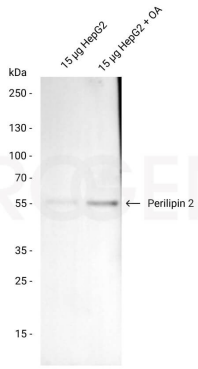
Background

Perilipin 2/Adipophilin/ADRP/PLIN2 is a ubiquitous component of lipid droplets. It has been found in milk fat globule membranes and on the surface of lipid droplets in various cultured cell lines; inducible by etomoxir.Enhanced expression of Perilipin 2/Adipophilin/ADRP/PLIN2 is a useful marker for pathologies characterized by increased lipid droplet accumulation. Such diseases include atheroma, steatosis, obesity and certain cases of liposarcoma. It also seems to be a potent marker for atherosclerosis. ADRP can also be used to study virus entry via lipid droplets.Polypeptide reacting: Perilipin 2/Adipophilin/ADRP/PLIN2, MW 48,100 (calculated from aa sequence data); apparent Mr 52,000 (after SDS-PAGE); pI 6.72.Immunolocalization: Perilipin 2/Adipophilin/ADRP/PLIN2 is positively detected in the glandular cells of lactating mammary gland (ductal cells are negative), zona fasciculata of the adrenal gland, Sertoli cells of the testis, and in fat-accumulating hepatocytes of alcoholic cirrhotic fatty liver; adipocytes are negative.Also positively stained are lipid-storing CD 68-positive macrophages.Tested cultured cell lines: PLC,

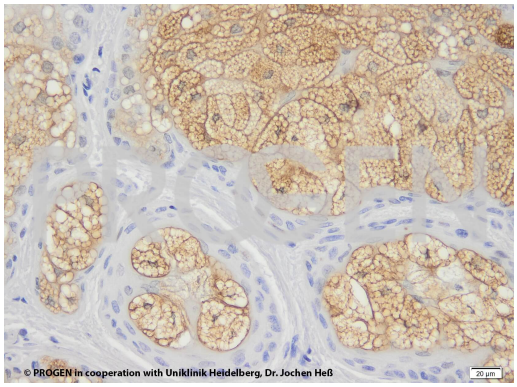
MDCK.

Learn more about PROGEN Perilipin antibodies.

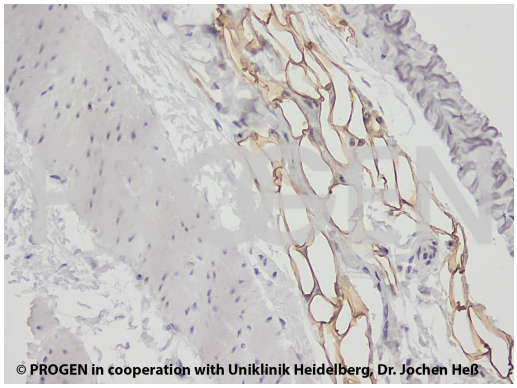
Product images



Western blot analysis of HepG2 cell lysate with anti-Perilipin 2 antibody. Western blot analysis was performed on 15 µg HepG2 lysate and 15 µg HepG2 + OA lysate. Cells were previously treated with 400 µM oleic acid (OA) if indicated. Cells were lysed in RIPA buffer. The PVDF membrane was blocked with 5% dry milk in PBST for 1 h at RT. The primary antibody anti-Perilipin 2 (N-terminus) mouse monoclonal, AP125 (Cat. No. 690102) was diluted in blocking buffer (antibody concentration 0.5 µg/ml) and incubated at 4°C over-night. The secondary antibody goat anti-mouse IgG polyclonal, HRP conjugate was also diluted in blocking buffer (antibody concentration 0.2 µg/ml) and incubated for 1 h at RT. The bands were visualized by chemiluminescent detection using PierceTM ECL Western Blotting Substrate.



IHC of human skin (courtesy of J.Heß, University Hospital Heidelberg)



IHC of rat stomach (courtesy of J.Heß, University Hospital Heidelberg)

References

Publication	Species	Application
Maeno, A. et al. A case of spontaneous Zymbal's gland carcinoma with lung metastasis in an aged Fischer 344 rat. J Toxicol Pathol. 34, 353-358(2021).	rat	IHC (paraffin)
Robenek, H., Lorkowski, S., Schnoor, M. & Troyer, D. Spatial Integration of TIP47 and Adipophilin in Macrophage Lipid Bodies*. J. Biol. Chem. 280, 5789-5794 (2004).	human	WB,ICC-IF,IEM
Bianchi, C. et al. The glucose and lipid metabolism reprogramming is grade-dependent in clear cell renal cell carcinoma primary cultures and is targetable to modulate cell viability and proliferation. Oncotarget. 8, 113502-113515 (2017).	human	WB
Straub, B. K., Stoeffel, P., Heid, H., Zimbelmann, R. & Schirmacher, P. Differential pattern of lipid droplet-associated proteins and de novo perilipin expression in hepatocyte steatogenesis. Hepatology 47, 1936-1946 (2008).	human	WB,IHC
Graham Hope, R. & McLauchlan, J. Sequence motifs required for lipid droplet association and protein stability are unique to the hepatitis C virus core protein. J. Gen. Virol. 81, 1913-1925 (2000).	syrian hamster	WB