

## Product datasheet

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

### Short overview

<b>Cat. No.</b>	610102
<b>Quantity</b>	50 µg
<b>Concentration</b>	50 µg/ml after reconstitution with 1 ml dist. water

### Product description

<b>Host</b>	Mouse
<b>Antibody Type</b>	Monoclonal
<b>Isotype</b>	IgG1
<b>Clone</b>	AP125
<b>Immunogen</b>	Synthetic peptide (aa 5-27 from N-terminus of human adipophilin/PLIN2)
<b>Formulation</b>	Lyophilized; reconstitute in 1 ml dist. water (final solution contains 0.09% sodium azide, 0.5% BSA in PBS buffer, pH 7.4)
<b>Synonym</b>	PLIN2, ADRP
<b>Conjugate</b>	Unconjugated
<b>Purification</b>	Affinity chromatography
<b>Storage before reconstitution</b>	2-8°C until indicated expiry date
<b>Storage after reconstitution</b>	Up to 3 months at 2-8°C; long term storage in aliquots at -20°C; avoid freeze/thaw cycles
<b>Intended use</b>	Research use only
<b>Application</b>	IHC, WB
<b>Reactivity</b>	Dog, Human, Rat
<b>No reactivity</b>	Bovine

### Applications

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

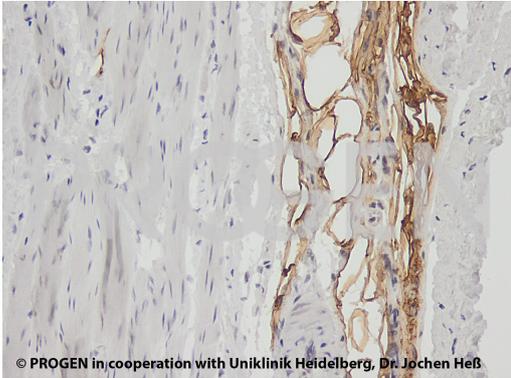
### Background

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 PROGEN Biotechnik GmbH | Maaßstraße 30 | D-69123 Heidelberg

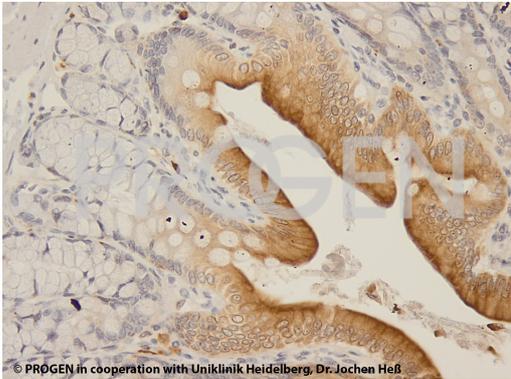
SDS-PAGE); pI 6.72. Immunolocalization: Perilipin 2/Adipophilin/ADRP/PLIN2 is positively detected in the glandular cells of lactating mammary gland (ductal cells are negative), zona fasciculata of the adrenal gland, Sertoli cells of the testis, and in fat-accumulating hepatocytes of alcoholic cirrhotic 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.

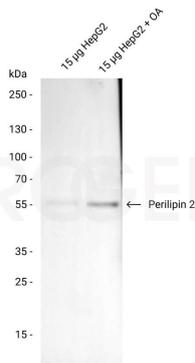
## Product images



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



IHC of rat colon (courtesy of J. Hess, University Hospital Heidelberg)



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 Pierce™ ECL Western Blotting Substrate.

## References

Publication	Species	Application
<a href="#">Hayakawa, M. et al. Lipid droplet accumulation and adipophilin expression in follicular thyroid carcinoma. Biochem. Biophys. Res. Commun. 640, 192â€“201 (2023).</a>	human	ICC-IF
<a href="#">Hara, Y. et al. A novel homozygous missense mutation in PNPLA2 in a patient manifesting primary triglyceride deposit cardiomyovasculopathy.. Mol Genet Metab Rep 34, 100960, (2023).</a>	human	IHC
<a href="#">Schmitt D. et al. Lipid and protein content profiling of isolated native autophagic vesicles.. EMBO Rep, 23, e53065, (2022).</a>	human	WB
<a href="#">Kamerkar, S. et al. Metabolic and immune-sensitive contacts between lipid droplets and endoplasmic reticulum reconstituted inÂ vitro., Proc Natl Acad Sci U S A 119, e2200513119, (2022).</a>	rat	WB
<a href="#">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).</a>	rat	IHC (paraffin)