

## Product datasheet

### anti-Perilipin 2 (N-terminus aa 1-29) guinea pig polyclonal, serum

#### Short overview

<b>Cat. No.</b>	GP40
<b>Quantity</b>	100 µl

#### Product description

<b>Host</b>	Guinea pig
<b>Antibody Type</b>	Polyclonal
<b>Immunogen</b>	Synthetic peptide (N-terminal aa 1-29 of human and murine adipophilin)
<b>Formulation</b>	Contains 0.09% sodium azide
<b>UniprotID</b>	Q99541 (Human), P43883 (Mouse)
<b>Synonym</b>	Perilipin-2, Adipophilin, Adipose differentiation-related protein, ADRP, PLIN2, ADFP
<b>Note</b>	Centrifuge prior to opening
<b>Conjugate</b>	Unconjugated
<b>Purification</b>	Stabilized antiserum
<b>Storage</b>	Short term 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>	ICC/IF, IHC, WB
<b>Reactivity</b>	Human, Mouse

#### Applications

<b>Immunocytochemistry (ICC)</b>	1:100-1:200
<b>Immunohistochemistry (IHC) - paraffin</b>	1:100-1:500 (microwave treatment recommended)
<b>Western Blot (WB)</b>	1:500-1:1,000

#### Background

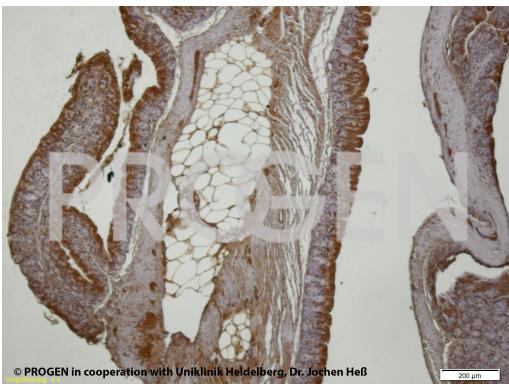
Perilipin 2/Adipophilin/ADRP/PLIN2 (a member of the PLIN/PAT family) is a ubiquitous component of lipid droplets. It has been found in milk fat globule membranes and on the surface of lipid droplets in various cultured cell lines; inducible by etomoxir. Enhanced expression of Perilipin 2/Adipophilin/ADRP/PLIN2 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 the virus entry via lipid droplets. Polypeptide reacting: specific for Perilipin 2/Adipophilin/ADRP/PLIN2, MW 48,100 (calculated from aa sequence data); apparent Mr 52,000 (after SDS-PAGE); pI 6.72. Immunolocalization: Adipophilin/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.

#### Product images

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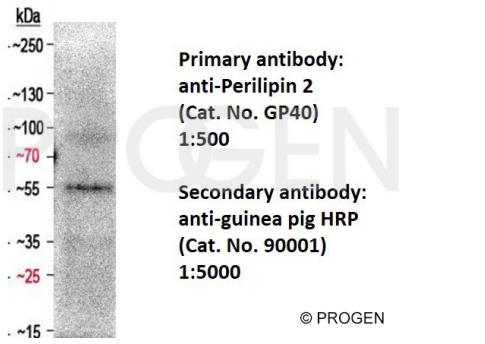
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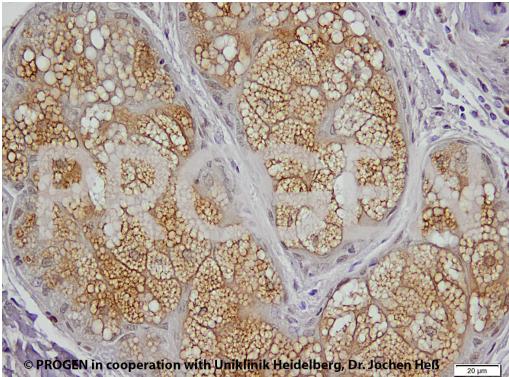
Mouse colon (courtesy of J.Hess, University Hospital Heidelberg)

TPH1 + oleic acid



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WB with anti-Perilipin 2 antibody (Cat. No. GP40, 1:500), THP1 cells treated with oleic acid whole cell lysate (8 ug)



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Human skin (courtesy of J.Hess, University Hospital Heidelberg)

## References

Publication	Species	Application
<a href="#">Kaushik S. et al. Chaperone-mediated autophagy regulates adipocyte differentiation., Sci Adv, 8, eabq2733, (2022).</a>	mouse	ICC/IF, WB
<a href="#">Kuramoto, K. et al.. The autophagy protein Becn1 improves insulin sensitivity by promoting adiponectin secretion via exocyst binding.. Cell Rep. 35, 109184(2021).</a>	mouse	WB
<a href="#">Gouna, G. et al. TREM2-dependent lipid droplet biogenesis in phagocytes is required for remyelination. J. Exp. Med. 218, (2021).</a>	Mouse	IHC-Fr-IF, WB
<a href="#">Scantleberry, A. et al. The dysregulation of metabolic pathways and induction of the pentose phosphate pathway in renal ischaemia-reperfusion injury. J Pathol. 253, 404-414(2021).</a>	mouse	IHC (paraffin)
<a href="#">LundÅsen, T. et al. The PPAR pan-agonist tetradecylthioacetic acid promotes redistribution of plasma cholesterol towards large HDL. PLoS.One. 15, e0229322 (2020)</a>	mouse	IHC (paraffin)