

## 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

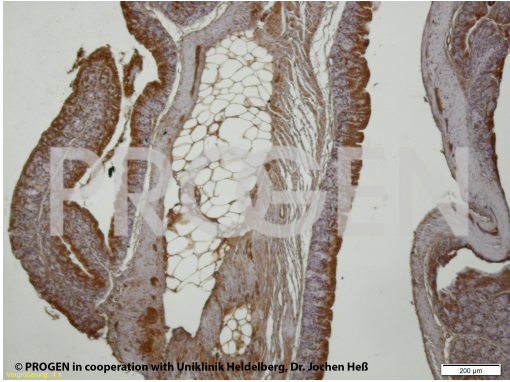
#### Applications

<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

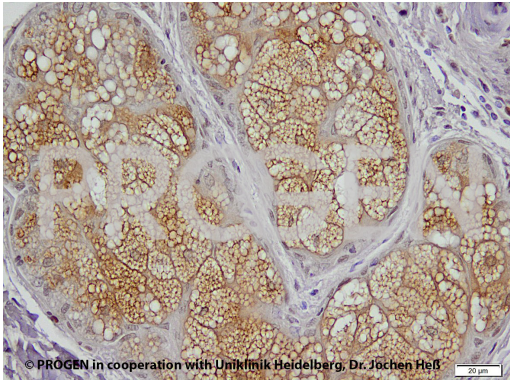
Perilipin 2/Adipophilin/ADRP/PLIN2 (a member of the PLIN/PAT family) is a ubiquitous component of lipid droplets. It has been found in milk fat globule membranes and on the surface of lipid droplets in various cultured cell lines; inducible by etomoxir. Enhanced expression of Perilipin 2/Adipophilin/ADRP/PLIN2 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



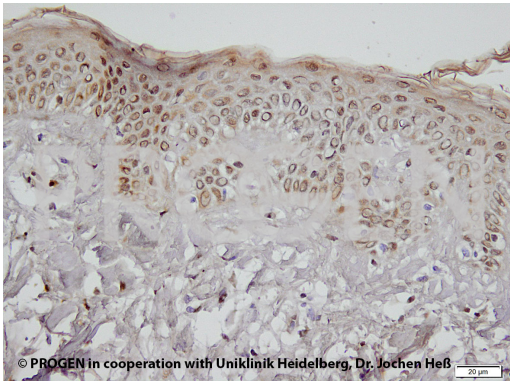
© PROGEN in cooperation with Uniklinik Heidelberg, Dr. Jochen Heß

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



© PROGEN in cooperation with Uniklinik Heidelberg, Dr. Jochen Heß

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



© PROGEN in cooperation with Uniklinik Heidelberg, Dr. Jochen Heß

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

## References

Publication	Species	Application
<a href="#">Pierre, L., Juszczak, F., et al., AMPK protects proximal tubular epithelial cells from lysosomal dysfunction and dedifferentiation induced by lipotoxicity., Autophagy 21, 860-880, (2025)</a>		IF
<a href="#">Chen, Y. et al. Migrasomes from adipose derived stem cells enrich CXCL12 to recruit stem cells via CXCR4/RhoA for a positive feedback loop mediating soft tissue regeneration. J Nanobiotechnology 22, 219 (2024).</a>	mouse	
<a href="#">Doncheva, A. I. et al. Altered hepatic lipid droplet morphology and lipid metabolism in fasted Plin2-null mice. J Lipid Res 64, (2023).</a>		WB
<a href="#">Hofer, P., et al., Cooperative lipolytic control of neuronal triacylglycerol by spastic paraplegia-associated enzyme DDHD2 and ATGL., J Lipid Res 64, 100457, (2023)</a>		WB
<a href="#">Ouni, M., et al., Differences in DNA methylation of HAMP in blood cells predicts the development of type 2 diabetes., Mol Metab 75, 101774, (2023)</a>		IHC

## References

Publication	Species	Application
<a href="#">Pierre, L., Juszczak, F., et al., AMPK protects proximal tubular epithelial cells from lysosomal dysfunction and dedifferentiation induced by lipotoxicity., Autophagy 21, 860-880, (2025)</a>		IF
<a href="#">Chen, Y. et al. Migrasomes from adipose derived stem cells enrich CXCL12 to recruit stem cells via CXCR4/RhoA for a positive feedback loop mediating soft tissue regeneration. J Nanobiotechnology 22, 219 (2024).</a>	mouse	
<a href="#">Doncheva, A. I. et al. Altered hepatic lipid droplet morphology and lipid metabolism in fasted Plin2-null mice. J Lipid Res 64, (2023).</a>		WB
<a href="#">Hofer, P., et al., Cooperative lipolytic control of neuronal triacylglycerol by spastic paraplegia-associated enzyme DDHD2 and ATGL., J Lipid Res 64, 100457, (2023)</a>		WB

<a href="#">Ouni, M., et al., Differences in DNA methylation of HAMP in blood cells predicts the development of type 2 diabetes., Mol Metab 75, 101774, (2023)</a>		IHC
--	--	-----