

## Product datasheet

anti-Perilipin 1 (N-terminus) mouse monoclonal, PERI 112.17, supernatant

### Short overview

<b>Cat. No.</b>	651156
<b>Quantity</b>	5 ml

### Product description

<b>Host</b>	Mouse
<b>Antibody Type</b>	Monoclonal
<b>Isotype</b>	IgG1
<b>Clone</b>	PERI 112.17
<b>Immunogen</b>	Synthetic peptide of perilipin / PLIN1 (duplicated N-terminus of perilipin; aa 1-20)
<b>Formulation</b>	Contains 0.09% sodium azide
<b>UniprotID</b>	O60240 (Human), Q8CGN5 (Mouse)
<b>Synonym</b>	Perilipin-1, Lipid droplet-associated protein, PLIN1, PERI, PLIN
<b>Conjugate</b>	Unconjugated
<b>Purification</b>	Hybridoma cell culture supernatant
<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
<b>Reactivity</b>	Human, Mouse

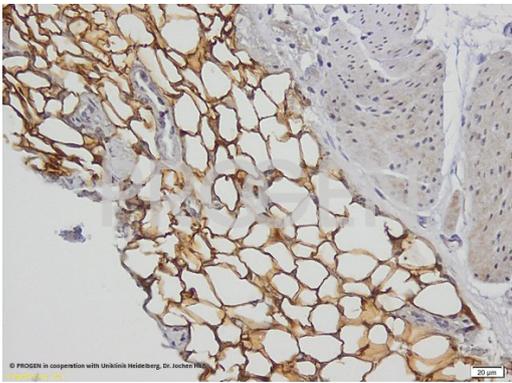
### Background

Perilipins build a family of phosphoproteins. The predominant forms in adipocytes, PLIN1 A and B arise by alternative RNA splicing from a single gene, generating polypeptides of 57 kDa and 46 kDa, respectively. The N-terminus, however, remains unchanged.

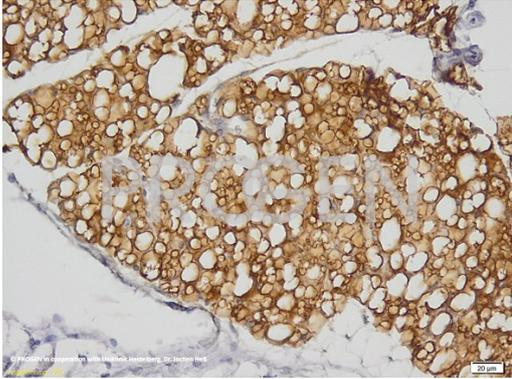
The antibody reacts specifically with all PLIN1 variants located at the surface of intracellular storage lipid droplets present e.g. in the adrenal gland, sebaceous gland, adipocytes of white and brown adipose tissue and cultured cells such as 3T3-L1 adipocytes and cultured steroidogenic adrenal cortical and Leydig cells. It is also a useful pathological marker for steatogenesis e.g. in liver. It does not cross-react with adipophilin (ADRP, also named PLIN2) or TIP47 (also named PLIN3) proteins (or additional members of the PLIN/PAT-family, e.g. MLDP or OXPAT/PAT-1, also named PLIN5 or LSDP5).

Tested reactivity on cultured cell lines: several human carcinoma cell lines; 3T3-L1 adipocytes.

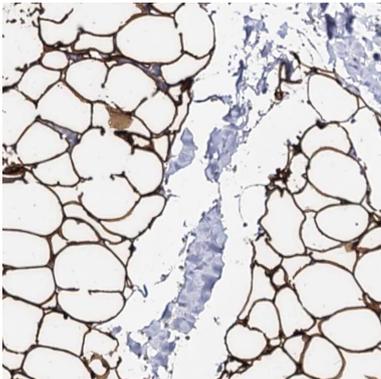
### Product images



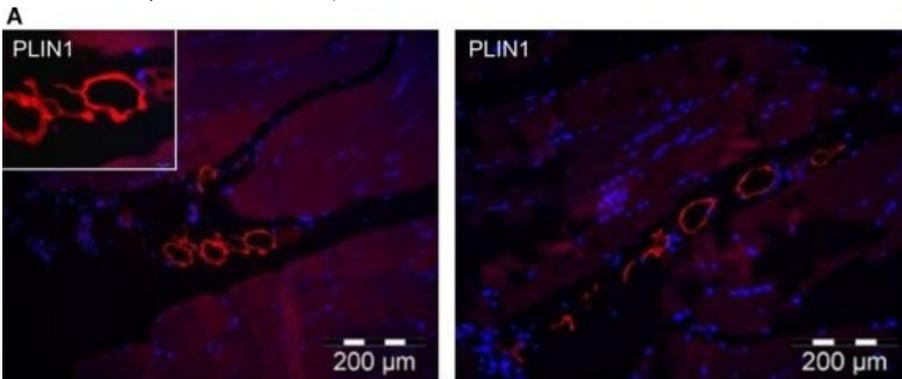
Mouse fat tissue (courtesy of J.Heß, University Hospital Heidelberg)



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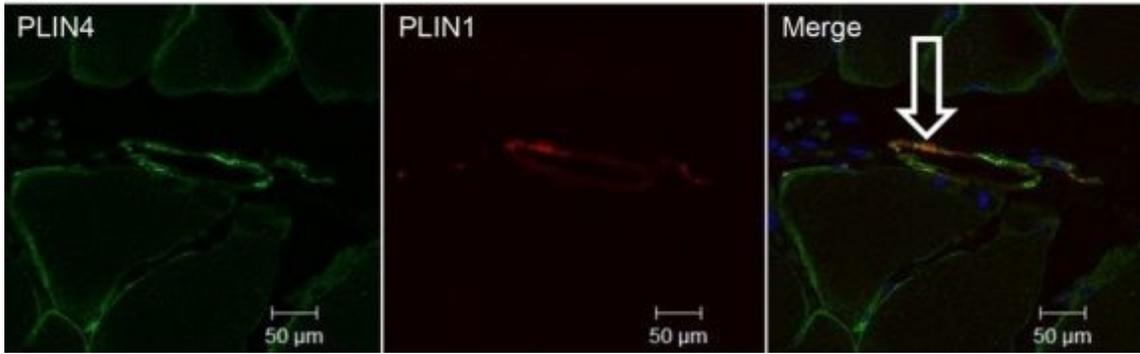
Perilipin 1 staining on human adipose tissue (courtesy of The Human Protein Atlas, www.proteinatlas.org, Thul PJ et al, 2017. A subcellular map of the human proteome. Science)



[Pourteymour, S., Lee, S., et al. Perilipin 4 in human skeletal muscle: localization and effect of physical activity. Physiol Rep. 2015-08-01.](#)

Species/Reactant: Homo sapiens (Human) Applications: Immunohistochemistry-paraffin Image collected and cropped by CiteAb from the following publication, provided under a CC-BY licence.

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[Pourteymour, S., Lee, S., et al. Perilipin 4 in human skeletal muscle: localization and effect of physical activity. \*Physiol Rep.\* 2015-08-01.](#)

Species/Reactant: Homo sapiens (Human) Applications: Immunohistochemistry-paraffin Image collected and cropped by CiteAb from the following publication, provided under a CC-BY licence.

## References

Publication	Species	Application
<a href="#">Combot, Y. et al. Seipin localizes at endoplasmic-reticulum-mitochondria contact sites to control mitochondrial calcium import and metabolism in adipocytes. Cell Rep. 38, (2022).</a>	Mouse	PLA
<a href="#">Nishimoto, K. et al. Dynamics of vitamin A uptake, storage, and utilization in vocal fold mucosa. Mol Metab. 40, 101025(2020).</a>	rat	IHC (frozen)/IF
<a href="#">Wada, S. et al. Submucosal fat accumulation in human colorectal tissue and its association with abdominal obesity and insulin resistance. United.European.Gastroenterol.J. 6, 1065-1073 (2018).</a>	human	IHC (paraffin)
<a href="#">Pourteymour, S. et al. Perilipin 4 in human skeletal muscle: localization and effect of physical activity. Physiol. Rep. 3, (2015).</a>	human	IHC (paraffin)
<a href="#">Heid, H. et al. On the formation of lipid droplets in human adipocytes: the organization of the perilipin-vimentin cortex. PLoS One 9, e90386 (2014).</a>	human	WB,ICC-IF