Product datasheet

anti-Perilipin 5 (N-terminus) guinea pig polyclonal, serum

Short overview

Cat. No.	GP44
Quantity	100 µl

Product description

Host	Guinea pig
Antibody Type	Polyclonal
Immunogen	Synthetic peptides (N-terminal aa 1-17/16-36 of human MLDP)
Formulation	Contains 0.09% sodium azide and 0.5% BSA
UniprotID	Q00G26 (Human)
Synomym	Perilipin-5, Lipid storage droplet protein 5, PLIN5, LSDP5, OXPAT, PAT-1
Note	Centrifuge prior to opening
Conjugate	Unconjugated
Purification	Stabilized antiserum
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	ICC/IF, IHC
Reactivity	Human

Applications

Immunocytochemistry (ICC)	Assay dependent
Immunohistochemistry (IHC) - frozen	1:100-1:200
Immunohistochemistry (IHC) - paraffin	1:100-1:200 (microwave treatment recommended)

Background

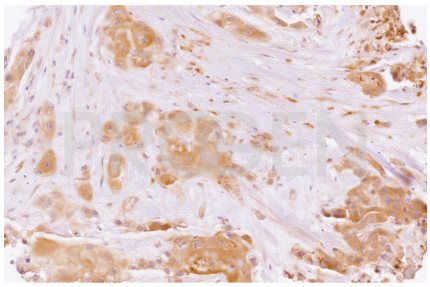
Polypeptide reacting: MLDP = myocardial lipid droplet protein (also described as OXPAT/PAT-1 and perilipin 5 or PLIN5), MW 50,844 (calculated from aa sequence data); apparent Mr 52,000 (after SDS-PAGE). MLDP / PLIN5 pertains to the PLIN/PAT-family proteins, covering the surface of cytoplasmic lipid droplets and sharing a homologuous domain called PAT. Additional PLIN/PAT proteins include adipophilin (ADRP, PLIN2), perilipin (PLIN1), and TIP47 (PLIN3) which are expressed in differentiation-related stages of lipid metabolism.

No cross-reactivity with additional PLIN/PAT proteins (including adipophilin/ADRP/PLIN2, perilipin/PLIN1, and TIP47/PLIN3) which are expressed in differentiation-related stages of lipid metabolism.

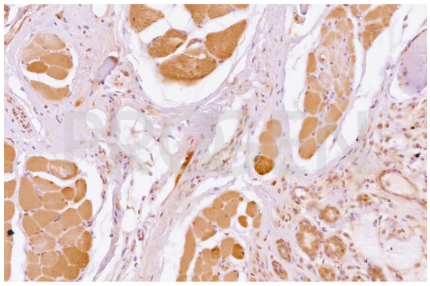
Tissue localization: MLDP/PLIN5 is positively detected in heart and skeletal muscle.

Reactivity on cultured cell lines: HaCat (human), SV80 (human).

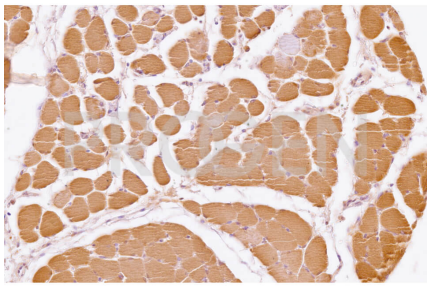
Product images



IHC analysis of human squamous cell carcinoma using anti-Perilipin 5 antibody (Cat. No. GP44). IHC was performed on formalin fixed paraffin embedded sections. The samples were deparaffinized with xylol and ethanol followed by heat induced antigen retrieval with 10 mM citrate buffer. After preparation the tissue was blocked with normal serum for 20 min at RT. The primary antibody anti-Perilipin 5 (Cat. No. GP44) was diluted in PBS (1:200) and incubated at 4°C over-night. The secondary antibody biotin anti-guinea pig was incubated for 30 min at RT. Sections were incubated with ABC solution (VectorLaboratories) for 30 min at RT. Slides were stained with DAB solution until a brown staining is visable and with Haemalaun for a few minutes. The 20x picture was acquired using microscopy (courtesy of J.Hess, University Hospital Heidelberg).



IHC analysis of human skelatel muscle using anti-Perilipin 5 antibody (Cat. No. GP44). IHC was performed on formalin fixed paraffin embedded sections. The samples were deparaffinized with xylol and ethanol followed by heat induced antigen retrieval with 10 mM citrate buffer. After preparation the tissue was blocked with normal serum for 20 min at RT. The primary antibody anti-Perilipin 5 (Cat. No. GP44) was diluted in PBS (1:200) and incubated at 4°C over-night. The secondary antibody biotin anti-guinea pig was incubated for 30 min at RT. Sections were incubated with ABC solution (VectorLaboratories) for 30 min at RT. Slides were stained with DAB solution until a brown staining is visable and with Haemalaun for a few minutes. The 20x picture was acquired using microscopy (courtesy of J.Hess, University Hospital Heidelberg).



IHC analysis of human muscle using anti-Perilipin 5 antibody (Cat. No. GP44). IHC was performed on formalin fixed paraffin embedded sections. The samples were deparaffinized with xylol and ethanol followed by heat induced antigen retrieval with 10 mM citrate buffer. After preparation the tissue was blocked with normal serum for 20 min at RT. The primary antibody anti-Perilipin 5 (Cat. No. GP44) was diluted in PBS (1:200) and incubated at 4°C over-night. The secondary antibody biotin anti-guinea pig was incubated for 30 min at RT. Sections were incubated with ABC solution (VectorLaboratories) for 30 min at RT. Slides were stained with DAB solution until a brown staining is visable and with Haemalaun for a few minutes. The 20x picture was acquired using microscopy (courtesy of J.Hess, University Hospital Heidelberg).

References

Publication	Species	Application
Najt C. P. et al. Organelle interactions compartmentalize hepatic fatty acid trafficking and metabolism., Cell Rep, 42, 112435, (2023).	Mouse	WB
Griffin, J. D., Bejarano, E., Wang, X. D. & Greenberg, A. S. Integrated action of autophagy and adipose tissue triglyceride lipase ameliorates diet-induced hepatic steatosis in liver-specific plin2 knockout mice. Cells 10, (2021).	mouse	WB
Heid, H. et al. Lipid droplets, perilipins and cytokeratins--unravelled liaisons in epithelium-derived cells. PLoS One 8, (2013).	human	WB,ICC-IF