

Product datasheet

anti-Perilipin 3 (N-terminus) guinea pig polyclonal, serum

Short overview

Cat. No.	GP30
Quantity	100 µl

Product description

Host	Guinea pig
Antibody Type	Polyclonal
Immunogen	Synthetic peptide of TIP47 N-terminus (aa 1-16)
Formulation	Contains 0.09% sodium azide and 0.5% BSA
UniprotID	Q3SX32 (Bovine), O60664 (Human), Q9DBG5 (Mouse), M0RA08 (Rat)
Synonym	Perilipin-3, 47 kDa mannose 6-phosphate receptor-binding protein, 47 kDa MPR-binding protein, Cargo selection protein TIP47, Mannose-6-phosphate receptor-binding protein 1, Placental protein 17, PP17, PLIN3, M6PRBP1, TIP47
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, WB
Reactivity	Human, Mouse, Rat

Applications

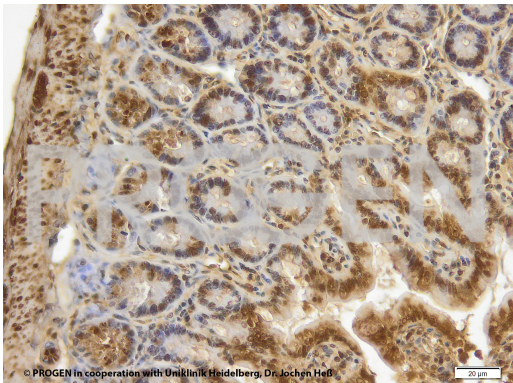
Immunocytochemistry (ICC)	1:100
Immunohistochemistry (IHC) - frozen	1:100-1:500
Immunohistochemistry (IHC) - paraffin	1:100-1:500 (microwave treatment recommended)
Western Blot (WB)	1:500-1:2,000

Background

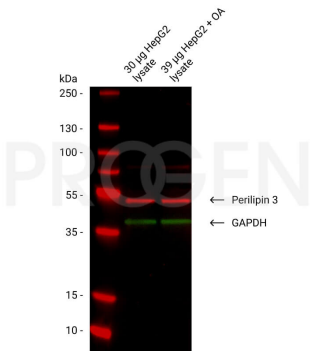
TIP47 (tail-interacting protein of 47 kDa; also named PLIN3) is involved in lipid droplet maturation. The protein has been localized in milk fat globule membranes of human and bovine origin. It has been described also as a placental protein. Increased amounts of TIP47 are secreted into circulation of cervix carcinoma patients. After radical surgery TIP47 serum levels are decreased (Than et al. 1999). TIP47 shows about 40% sequence homology to adipophilin (PLIN2). The GP30 antiserum, however, is specific for TIP47 (PLIN3) and does not cross-react with adipophilin (PLIN2) and perilipin (PLIN1) or other proteins of the PLIN/PAT family. Reactivity on cultured cell lines: PLC cells, pretreated with oleic acid.

17 (PP17): homology with adipophilin and the mouse adipose differentiation-related protein. Tumour Biol. J. Int. Soc. Oncodevelopmental Biol. Med. 20, 184-92 (1999).

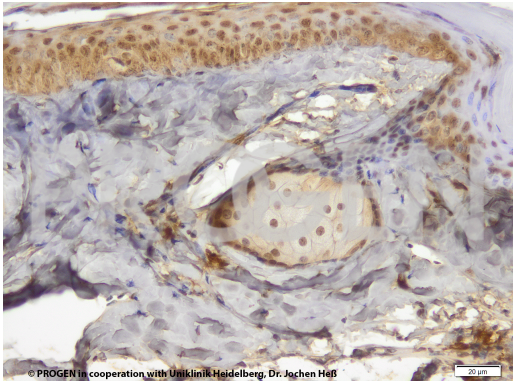
Product images



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



Western blot analysis of HepG2 cell lysate with anti-Perilipin 3 antibody. Western blot analysis was performed on 30 ug HepG2 lysate and 39 ug HepG2 + OA lysate. Cells were previously treated with 400 uM oleic acid (OA) if indicated. Cells were lysed with RIPA buffer. The PVDF membrane was blocked with 5% dry milk in PBST (PBS + 0.1% Tween 20) for 1 h at RT. The primary antibodies anti-Perilipin 3 (N-terminus) guinea pig polyclonal (Cat. No. GP30) and anti-GAPDH were diluted in blocking buffer (1:500 anti-Perilipin, 1.2 ug/ml anti-GAPDH, Cat. No. 690975) and incubated at 4°C over-night. The secondary antibodies donkey anti-guinea pig A647 and goat anti-mouse A488 were also diluted in blocking buffer (both 1:300) and incubated for 1 h at RT. The bands were visualized by fluorescent detection.



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

References

Publication	Species	Application
Churin, Y. et al. Lipid Storage and Interferon Response Determine the Phenotype of Ground Glass Hepatocytes in Mice and Humans. Cmh 12, 383â€“394 (2021).	Human	IHC-P-IF
SoÅ,tytsik, K. et al. Nuclear lipid droplets derive from a lipoprotein precursor and regulate phosphatidylcholine synthesis. Nat.Commun. 10, 473 (2019)	human	ICC-IF
Chen, Y. et al. Delayed recruiting of TPD52 to lipid droplets â€ evidence for a â€œsecond waveâ€ of lipid droplet-associated proteins that respond to altered lipid storage induced by Brefeldin A treatment. Sci. Rep. 9, (2019).	human	ICC-IF, WB
Heid, H. et al. Lipid droplets, perilipins and cytokeratins--unravalled liaisons in epithelium-derived cells. PLoS One 8, (2013).	human	WB,ICC-IF
Dahlhoff, M. et al. PLIN2, the major perilipin regulated during sebocyte differentiation, controls sebaceous lipid accumulation in vitro and sebaceous gland size in vivo NIH Public Access. Biochim. Biophys. Acta 1830, 4642-4649 (2013).	human	WB,IHC (paraffin)