Product datasheet

anti-Perilipin 4 (C-terminus) guinea pig polyclonal, serum

Short overview

Cat. No.	GP34
Quantity	100 µl

Product description

Host	Guinea pig
Antibody Type	Polyclonal
Immunogen	Synthetic peptide (C-terminal aa 1394-1410 of human S3-12 (also named PLIN4); C-QGLEQLLEGLQHNPPLS, coupled to KLH)
Formulation	Contains 0.09% sodium azide and 0.5% BSA
UniprotID	Q96Q06 (Human)
Synomym	Perilipin-4, Adipocyte protein S3-12, PLIN4, KIAA1881
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

Applications

Immunocytochemistry (ICC)	Assay dependent
Immunohistochemistry (IHC) - frozen	1:200-1:500
Immunohistochemistry (IHC) - paraffin	1:200-1:500 (microwave treatment recommended)
Western Blot (WB)	1:2,000

Background

Polypeptide reacting: S3-12, apparent Mr 140,000 (after SDS-PAGE).

S3-12 pertains to the PLIN/PAT-family proteins, covering the surface of cytoplasmic lipid droplets.

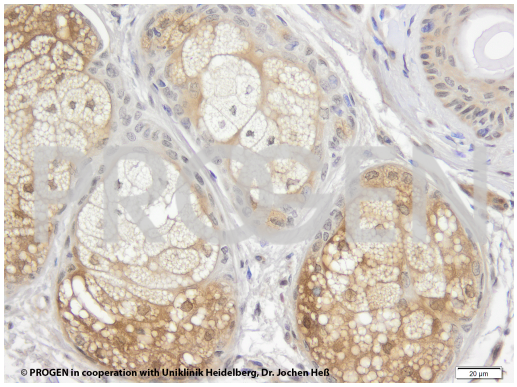
Additional PAT proteins include adipophilin (ADRP/PLIN2), perilipin (PLIN1), TIP47 (PLIN3), and MLDP (OXPAT/PAT-1, PLIN5 or LSDP5) which are expressed in differentiation-related stages of lipid metabolism.

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.

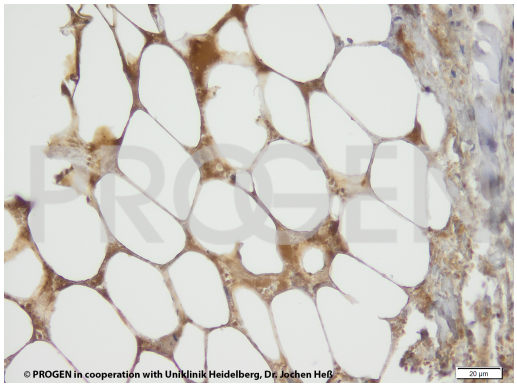
Tissue Immunolocalization: S3-12/PLIN4 is positively detected in lipid droplets of cultured cells.

Reactivity on cultured cell lines: PLC (human).

Product images



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



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References

Publication	Species	Application
Warde, K. M. et al. Mitotane Targets Lipid Droplets to Induce Lipolysis in Adrenocortical Carcinoma., Endocrinology 163, (2022).	human	WB
Gallardo-Montejano, V. I. et al. Nuclear Perilipin 5 integrates lipid droplet lipolysis with PGC-1a/SIRT1-dependent transcriptional regulation of mitochondrial function. Nat. Commun. 7, (2016).	mouse	WB
Pourteymour, S. et al. Perilipin 4 in human skeletal muscle: localization and effect of physical activity. Physiol. Rep. 3, (2015).	human	WB,IHC (paraffin)
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).	human	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	IHC (paraffin)