**Text S1:** *Remarks on ankyrin-like repeats, data base searches and literature SL1-SL13 for Supporting Information.* Ankyrins were found to be localized close to plasma membranes (PMs) and comprise a family playing a role for multiple membrane transporters, known as anchors of spectrin-based membrane skeleton [SL[10](#_ENREF_10)]. An original report on the cloning and sequencing of a PM protein named S3-12, mentioned 29 repeats and homology with adipophilin, but did not comment on these repeats as possible ankyrin members [SL[11](#_ENREF_11)]. We now found with sequence comparisons that these unusually high numbers of repeats could be previously unnoticed ankyrin-like repeats [for computer programs of the EXPASY server and “SUPERFAMILY” search see SL[5](#_ENREF_5)]. Additionally this program suggests one thiolase-like domain for S3-12, which is also described as an acetyl-Coenzyme A acetyltransferase (ACAT), a key enzyme in degradative pathways such as fatty acid beta-oxidation and the involvement in the synthesis of fatty acids and steroids (cp. also our findings of IPs and detection of ACAT with mab TIP47). Each repeat comprises 33 aa - the number of classical ankyrins - and exhibits modules with a helix-turn helix conformation (see **Fig. S7**). We further searched with other computer programs of the EXPASY server and found, e.g., with T-REKS not all, but 20 repeats of 33 aa length [SL[12](#_ENREF_12)]. But none of these other programs suggested a family relationship to ankyrins for S3-12. This aspect of ankyrin-like repeats within PLIN- proteins might be the link for the reported plasma membrane (PM) localization of PLIN protein antibodies [SL[11](#_ENREF_11), SL[13](#_ENREF_13)]. At the PM, together with the other identified IP proteins (clathrin, AP2-adaptor protein), in particular S3-12 might be capable and involved in the uptake of lipids and hydrophobic substances.

Literature for Supporting Information:

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