

DESCRIPTION

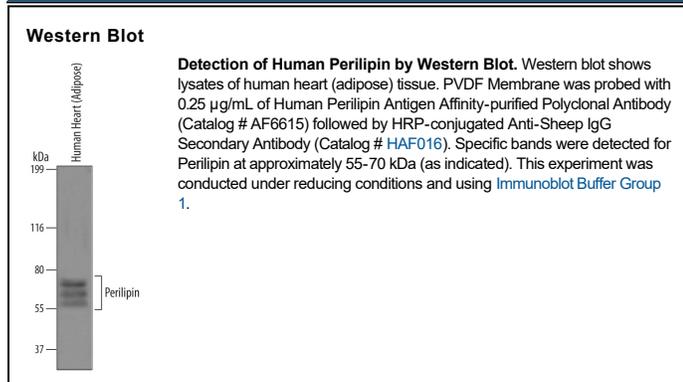
Species Reactivity	Human
Specificity	Detects human Perilipin in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Perilipin Thr8-Ala145 Accession # O60240
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Perilipin (Perilipin-1/A; also PLIN1 and Lipid droplet-associated protein) is a 62 kDa constitutively phosphorylated protein that belongs to the PAT (Perilipin/Adipophilin/TIP47) family of molecules. Found primarily in mature adipocytes, perilipin-1 interacts with lipid-coat proteins at the edge of the fat droplet and blocks lipase activity. Upon phosphorylation, perilipin-1 becomes a 65-67 kDa molecule that likely promotes the dispersion of docking molecules and provides a scaffold for lipase at the lipid droplet surface. Human perilipin-1 is 522 amino acids (aa) in length. It contains a lipid droplet targeting region (aa 233-364) that contains a polyGlu segment (aa 307-316). Phosphorylation at the N-terminus is necessary for lipase interaction with lipid. One 50-54 kDa human splice variant (perilipin-B) is reported that shows an 85 aa substitution for aa 404-522. This apparently interacts with cell membrane triglycerides. Over aa 8-145, human perilipin-1/A shares 97% aa identity with mouse perilipin-1.