

#### DESCRIPTION

|                                                                                                                                                                                                         |                                                                                          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Human                                                                                    |
| <b>Specificity</b>                                                                                                                                                                                      | Detects human Perilipin in direct ELISAs and Western blots.                              |
| <b>Source</b>                                                                                                                                                                                           | Polyclonal Sheep IgG                                                                     |
| <b>Purification</b>                                                                                                                                                                                     | Antigen Affinity-purified                                                                |
| <b>Immunogen</b>                                                                                                                                                                                        | <i>E. coli</i> -derived recombinant human Perilipin<br>Thr8-Ala145<br>Accession # O60240 |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 647<br>Excitation Wavelength: 650 nm<br>Emission Wavelength: 668 nm          |
| <b>Formulation</b>                                                                                                                                                                                      | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide                             |
| *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |                                                                                          |

#### 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.

**Western Blot** Optimal dilution of this antibody should be experimentally determined.

#### PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

#### 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.

#### PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.