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Store at -20C
#3470

Perilipin-1 (D418) Antibody

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W, IHC-P, IF-IC	Reactivity: H M	Sensitivity: Endogenous	MW (kDa): 62	Source/Isotype: Rabbit	UniProt ID: #O60240	Entrez-Gene Id: 5346
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Product Usage Information

Application

Western Blotting
Immunohistochemistry (Paraffin)
Immunofluorescence (Immunocytochemistry)

Dilution

1:1000
1:100
1:200

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

Perilipin-1 (D418) Antibody detects endogenous levels of total perilipin-1 protein.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to the sequence around Asp418 of human perilipin-1. Antibodies are purified by protein A and peptide affinity chromatography.

Background

Triacylglycerol is stored in lipid droplets as a primary energy reserve. Perilipin is localized at the periphery of lipid droplets and serves as a protective coating against lipases (1-3). Evidence suggests that PKA regulates lipolysis by phosphorylating perilipin (1,2,4,5). Phosphorylation of perilipin results in the conformational change that exposes lipid droplets to endogenous lipases, such as hormone-sensitive lipases (2). Hence, perilipin plays a pivotal role in lipid storage (2,5).

Background References

- Greenberg, A.S. et al. (1991) *J Biol Chem* 266, 11341-6.
- Brasaemle, D.L. (2007) *J Lipid Res* 48, 2547-59.
- Ducharme, N.A. and Bickel, P.E. (2008) *Endocrinology* 149, 942-9.
- Egan, J.J. et al. (1990) *J Biol Chem* 265, 18769-75.
- Brasaemle, D.L. et al. (2009) *Mol Cell Biochem* 326, 15-21.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **IHC-P:** Immunohistochemistry (Paraffin) **IF-IC:** Immunofluorescence (Immunocytochemistry)

Cross-Reactivity Key

H: Human **M:** Mouse

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