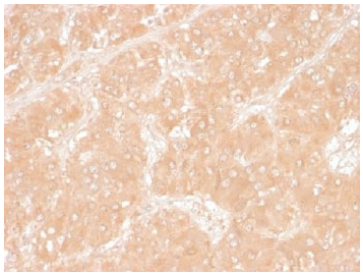
Perilipin 2 Antibody / Lipid Droplet Protein [clone ADFP/1366] (V3225)

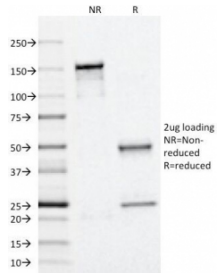
Catalog No.	Formulation	Size
V3225-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3225-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3225SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, lambda
Clone Name	ADFP/1366
Purity	Protein G affinity chromatography
Buffer	1X PBS, pH 7.4
Gene ID	123
Localization	Cytoplasmic
Applications	ELISA (order BSA/sodium azide-free format for coating) Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This Perilipin 2 Antibody / Lipid Droplet Protein is available for research use only.



Perilipin 2 Antibody Human Adrenal IHC. Immunohistochemical staining of FFPE human adrenal tissue using Perilipin 2 antibody (clone ADFP/1366) demonstrated diffuse cytoplasmic staining consistent with the abundant lipid droplet content of adrenal cortical cells. Heat-induced epitope retrieval was performed by steaming tissue sections in pH6, 10 mM citrate buffer for 10-20 minutes prior to staining. The observed staining pattern is consistent with the role of Perilipin 2 as a lipid droplet-associated protein involved in intracellular lipid storage and metabolism. This Perilipin 2 Antibody, also called a Lipid Droplet Protein Antibody, is useful for investigating lipid droplet biology, adrenal physiology, and metabolic regulation.



SDS-PAGE Analysis of Purified, BSA-Free Perilipin 2 Antibody (clone ADFP/1366). Confirmation of Integrity and Purity of the Antibody.

Description

Perilipin 2 Antibody / Lipid Droplet Protein, clone ADFP/1366, recognizes Perilipin 2, a lipid droplet-associated protein encoded by the PLIN2 gene. Perilipin 2 belongs to the perilipin family of lipid droplet coat proteins and is one of the earliest proteins recruited to newly formed lipid droplets. It is constitutively expressed in a broad range of tissues including liver, skeletal muscle, macrophages, kidney, adrenal gland, and numerous epithelial cell types. By coating the surface of neutral lipid droplets, Perilipin 2 regulates intracellular lipid storage, stabilizes lipid droplets, and helps coordinate cellular lipid metabolism. Its widespread expression has made it one of the most frequently used markers for lipid droplets in both normal physiology and disease research.

Perilipin 2 plays an essential role in maintaining lipid homeostasis by protecting stored triglycerides from excessive lipolysis while facilitating interactions with enzymes involved in lipid synthesis, storage, and mobilization. Expression is strongly induced during lipid loading, metabolic stress, and cellular differentiation, making Perilipin 2 a sensitive indicator of intracellular lipid accumulation. Because lipid droplets function as dynamic organelles involved in energy storage, membrane biogenesis, and stress adaptation, Perilipin 2 has become an important research target in studies of obesity, fatty liver disease, insulin resistance, atherosclerosis, and other metabolic disorders. Its localization to the lipid droplet surface also makes it valuable for investigating organelle dynamics and lipid trafficking.

Beyond metabolic disease, Perilipin 2 has gained significant importance in cancer biology and diagnostic pathology. Many tumors exhibit increased lipid droplet formation to support rapid proliferation and metabolic reprogramming, resulting in elevated Perilipin 2 expression. Immunohistochemical detection of Perilipin 2 is widely used to identify lipid-rich tumors, sebaceous neoplasms, adrenal cortical lesions, hepatocellular carcinoma, renal cell carcinoma, and other neoplasms characterized by abundant neutral lipid accumulation. Ongoing studies continue to investigate how altered Perilipin 2 expression contributes to tumor metabolism, oxidative stress responses, inflammation, and disease progression.

A Perilipin 2 Antibody is a valuable research tool for investigating lipid droplet biology, lipid metabolism, cellular energy homeostasis, metabolic disease, and lipid-rich tumors.

This Perilipin 2 Antibody antibody complements a related Adipophilin antibody targeting ADRP, PLIN2, and Perilipin 2.

Application Notes

Titering of the Perilipin 2 Antibody / Lipid Droplet Protein may be required for optimal performance.

Immunogen

A human partial recombinant protein was used as the immunogen for this Perilipin 2 antibody.

Storage

The Perilipin 2 antibody (with azide) can be stored at 2-8oC. The azide-free format should be aliquoted and stored at -20oC or colder.

Alternate Names

Perilipin 2 antibody, PLIN2 antibody, Adipophilin antibody, ADRP antibody, Adipose Differentiation-Related Protein

antibody

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