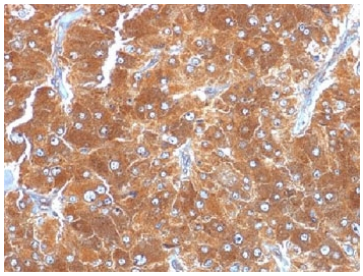
ADRP Antibody / Adipose Differentiation-Related Protein Antibody [clone ADFP/1494] (V3207)

Catalog No.	Formulation	Size
V3207-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3207-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3207SAF-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, kappa
Clone Name	ADFP/1494
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): 2-4ug/ml for 30 min at RT
Limitations	This ADRP Antibody / Adipose Differentiation-Related Protein Antibody is available for research use only.



ADRP Antibody Human Adrenal IHC. Immunohistochemical staining of FFPE human adrenal tissue using ADRP antibody (clone ADFP/1494) demonstrated strong 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 ADRP in intracellular lipid storage, lipid droplet formation, and lipid metabolism. This ADRP Antibody, also called an Adipose Differentiation-Related Protein Antibody, is useful for investigating lipid droplet biology, adrenal physiology, and metabolic regulation.

Description

ADRP Antibody / Adipose Differentiation-Related Protein Antibody, clone ADFP/1494, recognizes Adipose Differentiation-Related Protein (ADRP), a lipid droplet-associated protein encoded by the PLIN2 gene and now officially designated Perilipin 2. ADRP was originally identified as a protein induced during adipocyte differentiation and remains one of the most frequently cited historical names in the lipid metabolism literature. It is broadly expressed in hepatocytes, macrophages, skeletal muscle, kidney, adrenal gland, placenta, and numerous epithelial tissues, where it coats the surface of intracellular lipid droplets and regulates neutral lipid storage. Because ADRP expression closely reflects intracellular lipid accumulation, it has become a widely used marker for lipid droplets in both normal physiology and disease research.

ADRP functions by stabilizing lipid droplets and protecting stored triglycerides from excessive lipolysis while coordinating interactions with enzymes involved in lipid synthesis, storage, and mobilization. Expression increases markedly during lipid loading, oxidative stress, and metabolic adaptation, making ADRP an important indicator of altered lipid metabolism. As one of the principal members of the perilipin protein family, ADRP contributes to lipid droplet biogenesis, fatty acid homeostasis, membrane lipid turnover, and cellular responses to nutrient availability. These functions have established ADRP as an important research target in studies of obesity, hepatic steatosis, diabetes, cardiovascular disease, and other disorders involving dysregulated lipid metabolism.

ADRP has also become an important biomarker in oncology and diagnostic pathology. Many tumors accumulate abundant neutral lipids to support rapid proliferation and metabolic reprogramming, resulting in elevated ADRP expression. Immunohistochemical detection of ADRP is widely used to identify lipid-rich neoplasms, including sebaceous tumors, adrenal cortical lesions, hepatocellular carcinoma, renal cell carcinoma, and other tumors characterized by increased lipid droplet formation. Ongoing investigations continue to explore the role of ADRP in inflammation, oxidative stress, tumor metabolism, and disease progression across numerous organ systems.

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

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

Application Notes

Titering of the ADRP Antibody / Adipose Differentiation-Related Protein Antibody may be required for optimal performance.

Immunogen

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

Storage

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

Alternate Names

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

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