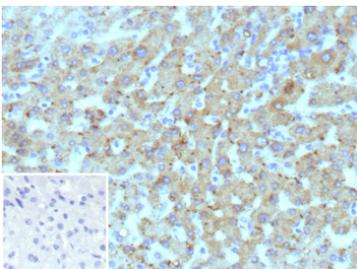


Hepatic lipid droplet protein Antibody / 17 beta hydroxysteroid dehydrogenase type 13 [clone HSD17B13/13107] (V5915)

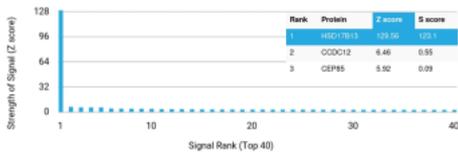
Catalog No.	Formulation	Size
V5915-100UG	0.2 mg/ml in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V5915-20UG	0.2 mg/ml in 1X PBS with 0.05% BSA, 0.05% sodium azide	20 ug
V5915SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

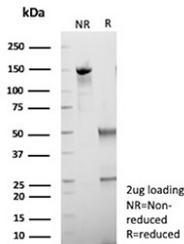
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	HSD17B13/13107
UniProt	Q7Z5P4
Localization	Cytoplasm, Endoplasmic reticulum, Lipid droplet
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml Western Blot : 2-4ug/ml
Limitations	This Hepatic lipid droplet protein antibody is available for research use only.



Formalin-fixed, paraffin-embedded human hepatocellular carcinoma stained with Hepatic lipid droplet protein antibody (clone HSD17B13/13107). Tumor hepatocytes show diffuse cytoplasmic brown chromogenic staining consistent with hepatic lipid droplet-associated 17 beta hydroxysteroid dehydrogenase type 13 expression, while nuclei are counterstained blue. Inset shows a PBS-only negative control processed without primary antibody, demonstrating minimal non-specific background staining.



Analysis of Protein Array containing more than 19,000 full-length human proteins using Hepatic lipid droplet protein antibody (clone HSD17B13/13107). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to be specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.



SDS-PAGE Analysis of purified Hepatic lipid droplet protein antibody (clone HSD17B13/13107). Confirmation of Purity and Integrity of Antibody.

Description

Hepatic lipid droplet protein antibody recognizes 17 beta hydroxysteroid dehydrogenase type 13, a liver-enriched enzyme encoded by the HSD17B13 gene that localizes predominantly to the cytoplasm and lipid droplet-associated compartments of hepatocytes. This protein belongs to the short-chain dehydrogenase reductase family and is strongly linked to hepatic lipid metabolism. Because of its restricted tissue distribution and functional association with lipid droplets, a hepatic lipid droplet protein antibody is widely used in studies of liver biology, metabolic regulation, and fatty liver disease.

17 beta hydroxysteroid dehydrogenase type 13 is structurally related to other hydroxysteroid dehydrogenases but displays a distinct expression pattern that is largely confined to liver tissue. In hepatocytes, the protein associates with lipid droplets, positioning it at the interface between lipid storage and metabolic processing. Hepatic lipid droplet protein antibody-based detection enables visualization and analysis of this compartmentalized expression pattern, supporting research into lipid droplet dynamics and hepatocellular metabolism.

Genetic and functional studies have identified 17 beta hydroxysteroid dehydrogenase type 13 as a key modifier of liver disease susceptibility. Loss-of-function variants in the HSD17B13 gene are associated with reduced risk of non-alcoholic fatty liver disease, steatohepatitis, and progression to advanced liver fibrosis. Conversely, altered expression of this hepatic lipid droplet protein has been reported in fatty liver disease and hepatocellular carcinoma. Use of a hepatic lipid droplet protein antibody allows researchers to examine protein-level changes associated with disease risk, progression, and tumor biology.

As a member of the hydroxysteroid dehydrogenase family, 17 beta hydroxysteroid dehydrogenase type 13 contains a conserved enzymatic domain characteristic of short-chain dehydrogenase reductases. Although its precise endogenous substrates remain an area of active investigation, its lipid droplet localization suggests a role in regulating lipid-associated redox reactions or signaling pathways within hepatocytes. A hepatic lipid droplet protein antibody therefore provides a valuable tool for exploring enzyme localization, metabolic context, and functional interactions in liver cells.

Expression of 17 beta hydroxysteroid dehydrogenase type 13 is minimal or absent in most extrahepatic tissues, making it a useful marker of hepatocyte identity and liver-specific metabolic states. Antibody-based detection of this hepatic lipid droplet protein is particularly useful in studies of hepatic differentiation, metabolic remodeling, and liver pathology. Clone HSD17B13/13107 is designed to recognize 17 beta hydroxysteroid dehydrogenase type 13 and supports detection of this

target in relevant research applications. NSJ Bioreagents offers this hepatic lipid droplet protein antibody to support investigations into liver metabolism, fatty liver disease biology, and hepatocellular function.

Application Notes

Optimal dilution of the Hepatic lipid droplet protein antibody should be determined by the researcher.

Immunogen

A recombinant fragment (around amino acids 1-200) of human HSD17B13 protein (exact sequence is proprietary) was used as the immunogen for the Hepatic lipid droplet protein antibody.

Storage

Hepatic lipid droplet protein antibody with sodium azide - store at 2 to 8°C; antibody without sodium azide - store at -20 to -80°C.