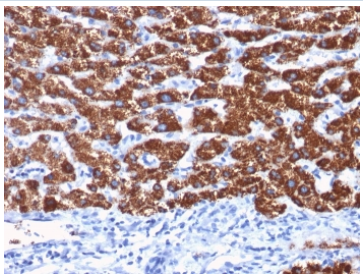
Hep Par 1 Antibody / Hepatocyte Paraffin 1 [clone OCH1E5] (V2341)

Catalog No.	Formulation	Size
V2341-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2341-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2341SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2341IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

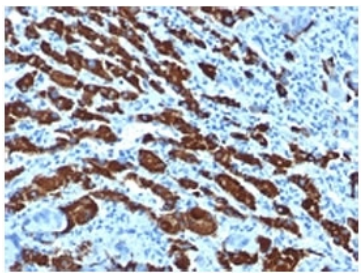
Citations (13)

Bulk quote request

Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	OCH1E5
Purity	Protein G affinity
Buffer	1X PBS, pH 7.4
Gene ID	Unknown
Localization	Finely granular cytoplasmic
Applications	Immunofluorescence : 0.5-1ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This Hep Par 1 antibody is available for research use only.



IHC staining of human hepatocellular carcinoma with Hep Par 1 antibody (clone OCH1E5). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



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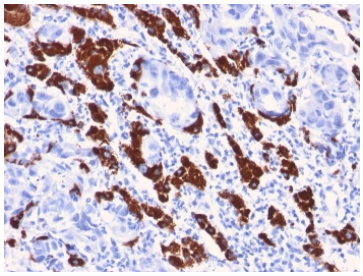
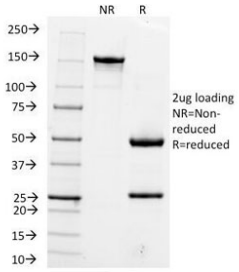


IHC staining of human liver with Hep Par 1 antibody (clone OCH1E5). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free Hep Par 1 antibody (clone OCH1E5) as confirmation of integrity and purity.

Description

Hep Par 1 antibody clone OCH1E5 is a monoclonal antibody directed against hepatocyte paraffin 1 antigen, also known as carbamoyl phosphate synthetase 1 (CPS1). This mitochondrial enzyme is expressed predominantly in hepatocytes, where it catalyzes the first committed step of the urea cycle. Because of its restricted expression in liver tissue, Hep Par 1 is a highly specific marker of hepatocellular differentiation. NSJ Bioreagents provides Hep Par 1 antibody clone OCH1E5 as a trusted tool for research in liver biology, metabolic pathways, and hepatocellular carcinoma pathology.

Hep Par 1 antibody clone OCH1E5 produces strong granular cytoplasmic staining in hepatocytes, reflecting the mitochondrial localization of CPS1. Its high sensitivity and specificity for hepatocyte lineage have made it a standard marker in diagnostic pathology. Pathologists rely on this antibody to confirm hepatocellular origin when evaluating tumors, especially in distinguishing hepatocellular carcinoma from metastatic carcinomas that involve the liver. The clear and distinctive staining pattern of clone OCH1E5 provides confidence in diagnostic interpretation.

In oncology, Hep Par 1 antibody clone OCH1E5 is frequently used to characterize hepatocellular carcinoma. Positive staining supports hepatocyte differentiation, while absence of expression in poorly differentiated tumors provides additional information about disease progression and tumor biology. This antibody is often included in immunohistochemical panels with markers such as arginase-1 and glypican-3 to improve diagnostic accuracy in liver cancer.

Beyond pathology, Hep Par 1 antibody clone OCH1E5 has value in liver biology and metabolic research. CPS1 plays a central role in ammonia detoxification via the urea cycle, and detection with this antibody provides insights into hepatocyte function in both normal and diseased states. Research into metabolic liver diseases, such as hyperammonemia and CPS1 deficiency, benefits from detection of this enzyme.

Hep Par 1 antibody clone OCH1E5 has also been applied in studies of liver development and regeneration. During embryogenesis and in regenerative processes following liver injury, CPS1 expression highlights hepatocyte differentiation

and functional recovery. Detection with clone OCH1E5 thus provides a valuable marker for monitoring liver cell identity in developmental and regenerative contexts.

Technically, Hep Par 1 antibody clone OCH1E5 has been validated in tissue-based studies, consistently delivering strong and specific mitochondrial staining with minimal background. Its reproducibility and long-standing use in pathology have led to extensive citation in hepatology, oncology, and developmental research literature. Alternate names include carbamoyl phosphate synthetase 1 antibody, hepatocyte lineage marker antibody, and urea cycle enzyme CPS1 antibody.

Application Notes

The concentration stated for each application is a general starting point. Variations in protocols, secondaries and substrates may require the Hep Par 1 antibody to be titered up or down for optimal performance.

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Extract of a formalin-fixed, rejected-allograft of a human liver was used as the immunogen for this Hep Par 1 antibody.

Storage

Store the Hep Par 1 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

References (2)