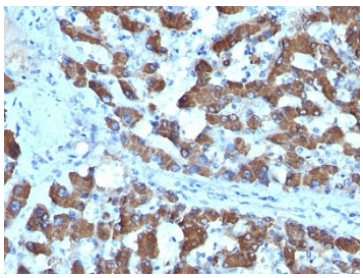
CPS1 Antibody [clone SPM615] (V2468)

Catalog No.	Formulation	Size
V2468-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2468-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2468SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2468IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	SPM615
Purity	Protein G affinity chromatography
UniProt	P31327
Localization	Finely granular cytoplasmic
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This CPS1 antibody is available for research use only.



IHC: Formalin-fixed, paraffin-embedded human hepatocellular carcinoma stained with CPS1 antibody (SPM615).

Description

This mAb recognizes a protein of 165kDa, identified as carbamoyl phosphate synthetase 1 (CPS1). This mitochondrial enzyme catalyzes synthesis of carbamoyl phosphate from ammonia and bicarbonate. This reaction is the first committed step of the urea cycle, which is important in the removal of excess urea from cells. Deficiency of CPS1 is an autosomal recessive disorder that causes hyperammonemia. CPS1 is a hepatocyte specific protein that localizes to the mitochondria of hepatocytes. It is a sensitive marker for distinguishing hepatocellular carcinomas (HCC) from other metastatic carcinomas as well as cholangio-carcinomas. HCCs occur primarily in the stomach, but they are also found in many other organs. CPS1 may also be a useful marker for intestinal metaplasia. Reportedly, strong expression of CPS1 correlates with smaller tumor size and longer patient survival. Occasionally, CPS1 is also found in gastric carcinomas as well as in a few other non-hepatic tumors.

For a validated reference of CPS1 expression in liver and hepatocellular tumors, see the CPS1 antibody clone CPS1/9859 with supporting IHC and western blot data.

Application Notes

Optimal dilution of the CPS1 antibody should be determined by the researcher.

1.Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 10-20 min followed by cooling at RT for 20 min
2. 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

Recombinant human protein was used as the immunogen for the CPS1 antibody.

Storage

Store the CPS1 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Copyright © NSJ Bioreagents. All rights reserved.