

Datasheet for ABIN6939176

anti-CPS1 antibody[Go to Product page](#)**1** Image

Overview

Quantity:	100 µg
Target:	CPS1
Reactivity:	Human, Dog
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This CPS1 antibody is un-conjugated
Application:	Immunofluorescence (IF), Immunohistochemistry (IHC), Staining Methods (StM)

Product Details

Immunogen:	Recombinant human CPS1 protein
Clone:	SPM615
Isotype:	IgG1 kappa
Specificity:	<p>This MAb recognizes a protein of 165 kDa, 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. HCC's 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,</p>

Product Details

CPS1 is also found in gastric carcinomas as well as in a few other non-hepatic tumors.

Purification: Purified by Protein A/G

Target Details

Target: CPS1

Alternative Name: CPS1 ([CPS1 Products](#))

Molecular Weight: ~165kDa

Gene ID: 1373

UniProt: [P31327](#)

Pathways: [Response to Growth Hormone Stimulus](#), [Cellular Glucan Metabolic Process](#)

Application Details

Application Notes: Positive Control: HeLa cells. Liver or Hepatocellular Carcinoma (HCC).
Known Application: Immunofluorescence (0.5-1.0 µg/mL), Immunohistochemistry (Formalin-fixed) (1-2 µg/mL for 30 minutes at RT)(Staining of formalin-fixed tissues requires boiling tissue sections in 1 mM EDTA, pH 7.5-8.5, for 10-20 min followed by cooling at RT for 20 minutes)Optimal dilution for a specific application should be determined.

Restrictions: For Research Use only

Handling

Concentration: 200 µg/mL

Buffer: 10 mM PBS with 0.05 % BSA & 0.05 % azide.

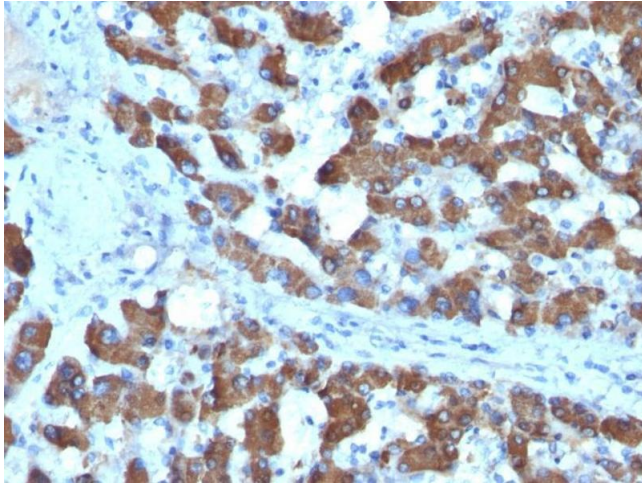
Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: 4 °C, -80 °C

Storage Comment: Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

Expiry Date: 24 months



Immunohistochemistry

Image 1. Formalin-fixed, paraffin-embedded human Hepatocellular Ca stained with CPS1 Monoclonal Antibody (SPM615).