CPS1 / Carbamoyl-Phosphate Synthetase (Hepatocellular Marker) Antibody

Mouse Monoclonal Antibody [Clone CPS1/1022]

Catalog No	Format	Size
1373-MSM1-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
1373-MSM1-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
1373-MSM1-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

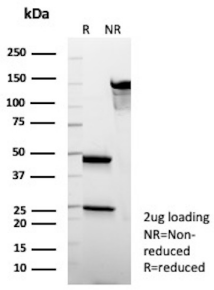
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

Product Details

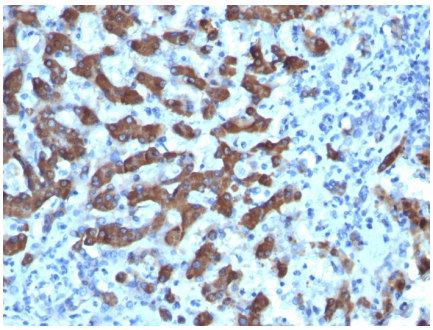
Clone	CPS1/1022
Gene Name	CPS1
Immunogen	Recombinant human CPS1 protein
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG1 / Kappa
Mol. Weight of Antigen	~165kDa
Cellular Localization	Mitochondrion, Nucleolus, Nucleus
Species Reactivity	Dog, Human
Positive Control	HeLa cells. Liver or Hepatocellular Carcinoma (HCC).

**Optimal dilution for a specific application should be determined.*

Product Images for CPS1 / Carbamoyl-Phosphate Synthetase (Hepatocellular Marker) Antibody



SDS-PAGE Analysis of Purified CPS1 Mouse Monoclonal Antibody (CPS1/1022). Confirmation of Purity and Integrity of Antibody.



Formalin-fixed, paraffin-embedded human hepatocellular carcinoma stained with CPS1 Mouse Monoclonal Antibody (CPS1/1022).

Specificity & Comments

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

Supplied As

200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage and Stability

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.

Research Areas

Cardiovascular, Nuclear Marker

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis.There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.