Recombinant CPS1 / Carbamoyl-Phosphate Synthetase (Hepatocellular Marker) Antibody

Rabbit Monoclonal Antibody [Clone CPS1/13326R]

Catalog No	Format	Size
1373-RBM32-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug
1373-RBM32-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
1373-RBM32-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug

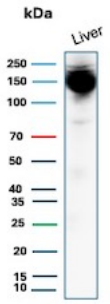
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)	2-4ug/ml	

Product Details

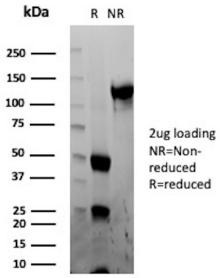
Clone	CPS1/13326R
Gene Name	CPS1
Immunogen	Recombinant full-length human CPS1 protein
Host	Rabbit
Clonality	Monoclonal
Isotype / Light Chain	IgG / Kappa
Mol. Weight of Antigen	~165kDa
Cellular Localization	Cytoplasm
Species Reactivity	Human, Mouse, Rat
Positive Control	HeLa cells. Liver or hepatocellular carcinoma (HCC).

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

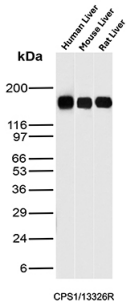
Product Images for Recombinant CPS1 / Carbamoyl-Phosphate Synthetase (Hepatocellular Marker) Antibody



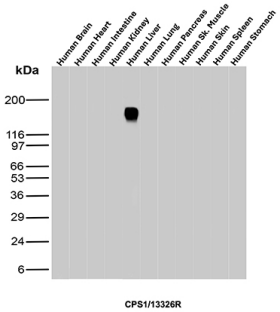
SDS-PAGE Analysis of Purified Recombinant Carbamoyl-phosphate synthase [ammonia], mitochondrial / CPS1 Rabbit Monoclonal Antibody (CPS1/13326R). Confirmation of Purity and Integrity of Antibody.



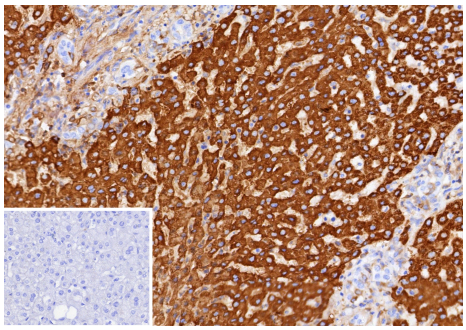
SDS-PAGE Analysis of Purified Carbamoyl-Phosphate Synthetase Recombinant Rabbit Monoclonal Antibody (CPS1/13326R). Confirmation of Purity and Integrity of Antibody.



Western blot analysis of Human liver, Mouse Liver and Rat Liver tissue lysates using Carbamoyl-Phosphate Synthetase (CPS1) Recombinant Rabbit Monoclonal Antibody (CPS1/13326R).



Western blot analysis of Human Brain, Human Heart, Human Intestine, Human Kidney, Human Liver, Human Lung, Human Pancreas, Human Skeletal muscle, Human Skin, Human Spleen and Human Stomach tissue lysates using Carbamoyl-Phosphate Synthetase (CPS1) Recombinant Rabbit Monoclonal Antibody (CPS1/13326R).



Formalin-fixed, paraffin-embedded human hepatocellular carcinoma (HCC) stained with Carbamoyl-Phosphate Synthetase (CPS1) Recombinant Rabbit Monoclonal Antibody (CPS1/13326R). Inset: PBS instead of primary antibody; secondary only negative control.

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 produced in CHO cell mammalian-based expression system. 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.