

## Product datasheet for **UM800171**

### CPS1 Mouse Monoclonal Antibody [Clone ID: UMAB281]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	UMAB281
Applications:	IHC, WB
Recommended Dilution:	WB 1:1000, IHC 1:1000
Reactivity:	Mouse, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Human recombinant protein fragment corresponding to amino acids 1367-1506 of human CPS1 (NP_001116105) produced in E.coli.
Formulation:	PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.
Concentration:	1 mg/ml
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Predicted Protein Size:	165.65 kDa
Gene Name:	carbamoyl-phosphate synthase 1
Database Link:	<a href="#">NP_001116105</a> <a href="#">Entrez Gene 227231 Mouse</a> <a href="#">Entrez Gene 497840 Rat</a> <a href="#">P31327</a>
Background:	The mitochondrial enzyme encoded by this gene 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. The encoded protein may also represent a core mitochondrial nucleoid protein. Three transcript variants encoding different isoforms have been found for this gene. The shortest isoform may not be localized to the mitochondrion. Mutations in this gene have been associated with carbamoyl phosphate synthetase deficiency, susceptibility to persistent pulmonary hypertension, and susceptibility to venoocclusive disease after bone marrow transplantation.[provided by RefSeq, May 2010].



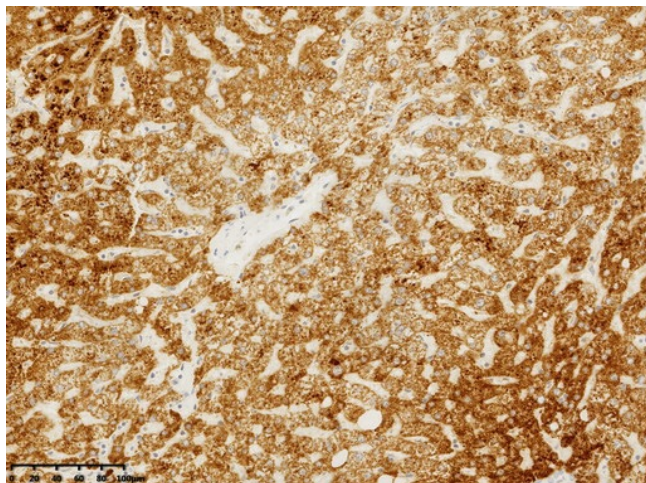
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**Synonyms:** CPSASE1; GATD6; PHN

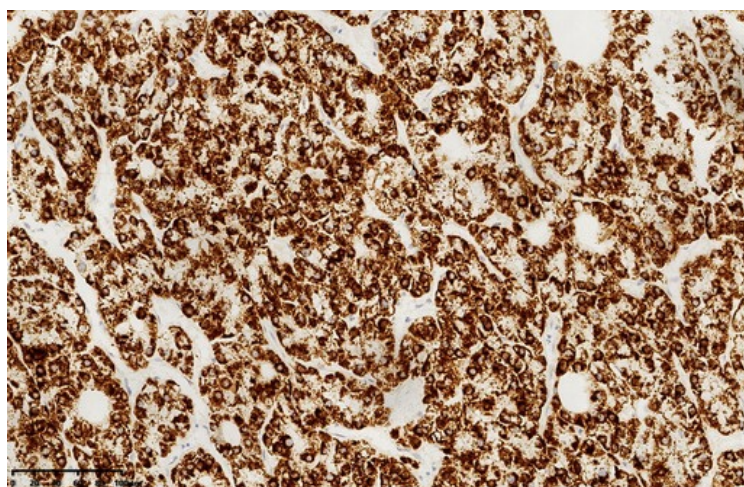
**Protein Families:** Druggable Genome

**Protein Pathways:** Alanine, aspartate and glutamate metabolism, Arginine and proline metabolism, Metabolic pathways, Nitrogen metabolism

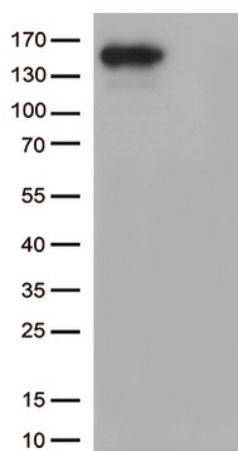
**Product images:**



Immunohistochemical staining of paraffin-embedded Human liver tissue within the normal limits using anti-CPS1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.0) at 120°C for 3 min, UM800171) (1:1000)



Immunohistochemical staining of paraffin-embedded Carcinoma of Human liver tissue using anti-CPS1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.0) at 120°C for 3 min, UM800171) (1:1000)



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Right lane) or pCMV6-ENTRY CPS1 (Cat# [RC226402], Left lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CPS1 antibody (Cat# UM800171) (Cat# UM800171) (1:1000).