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CPS1 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant CPS1.
Catalog # AT1608a

Product Information

Application	WB, IHC, E
Primary Accession	P31327
Other Accession	NM_001875
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 Kappa
Clone Names	8H8
Calculated MW	164939

Additional Information

Gene ID	1373
Other Names	Carbamoyl-phosphate synthase [ammonia], mitochondrial, Carbamoyl-phosphate synthetase I, CPSase I, CPS1
Target/Specificity	CPS1 (NP_001866, 1400 a.a. ~ 1500 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IHC~~1:100~500 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	CPS1 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

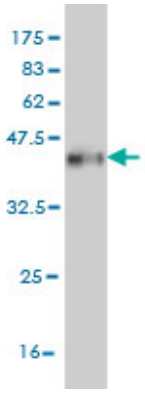
Background

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.

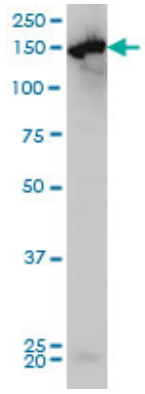
References

Common variants conferring risk of schizophrenia: a pathway analysis of GWAS data. Jia P, et al. Schizophr Res, 2010 Sep. PMID 20659789.Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.The T1405N carbamoyl phosphate synthetase polymorphism does not affect plasma arginine concentrations in preterm infants. Moonen RM, et al. PLoS One, 2010 May 25. PMID 20520828.Effect of CPS1 4217C > A genotype on valproic acid-induced hyperammonemia. Yagi M, et al. Pediatr Int, 2010 Apr 22. PMID 20456087.New loci associated with kidney function and chronic kidney disease. K?ttgen A, et al. Nat Genet, 2010 May. PMID 20383146.

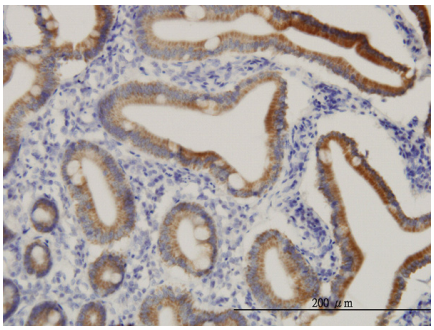
Images



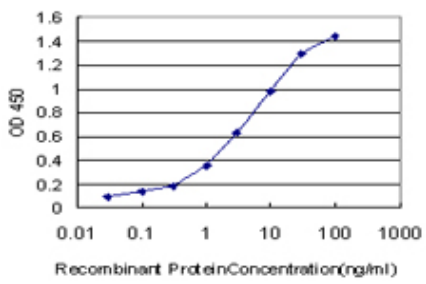
Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.85 KDa) .



CPS1 monoclonal antibody (M01), clone 8H8 Western Blot analysis of CPS1 expression in HeLa ((Cat # AT1608a)



Immunoperoxidase of monoclonal antibody to CPS1 on formalin-fixed paraffin-embedded human small Intestine. [antibody concentration 3 ug/ml]



Detection limit for recombinant GST tagged CPS1 is approximately 0.03ng/ml as a capture antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.