

ARG45459 anti-CPS1 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes CPS1
Tested Reactivity	Hu, Ms, Rat, Mk
Tested Application	FACS, ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	CPS1
Species	Human
Immunogen	Recombinant protein containing to human CPS1.
Conjugation	Un-conjugated
Alternate Names	CPS1; CPSASE1; Carbamoyl-phosphate synthase [ammonia], mitochondrial; CPSase I; PHN; Carbamoyl-phosphate synthetase I; EC 6.3.4.16

Application Instructions

Application table	Application	Dilution
	FACS	1 - 3 µg/10 ⁶ cells
	ICC/IF	5 µg/ml
	IHC-P	2-5 µg/ml
	WB	0.1-0.25 µg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	165 kDa	

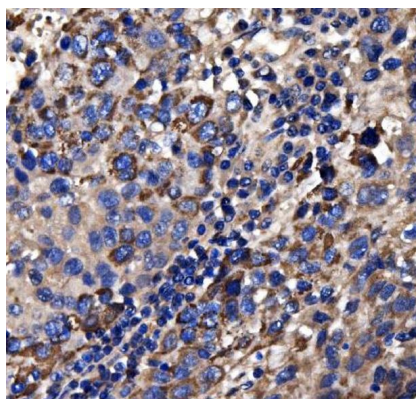
Properties

Form	Powder
Purification	Affinity purified
Buffer	0.2% Na ₂ HPO ₄ , 0.9% NaCl and 4% Trehalose.
Stabilizer	4% Trehalose
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Bioinformation

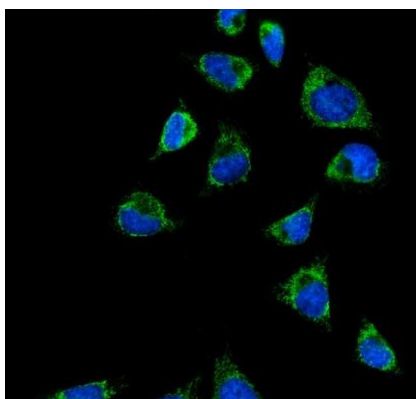
Gene Symbol	CPS1
Gene Full Name	carbamoyl-phosphate synthase 1, mitochondrial
Background	The mitochondrial enzyme encoded by this gene catalyzes synthesis of carbamoyl phosphate from ammonia and bicarbonate. This reaction is the first committed step of the urea cycle, which is important in the removal 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]
Function	Involved in the urea cycle of ureotelic animals where the enzyme plays an important role in removing excess ammonia from the cell. [UniProt]
Calculated Mw	165 kDa
PTM	Undergoes proteolytic cleavage in the C-terminal region corresponding to the loss of approximately 12 AA residues from the C-terminus. Succinylated at Lys-287 and Lys-1291. Desuccinylated at Lys-1291 by SIRT5, leading to activation (By similarity). Glutarylated. Glutarylation levels increase during fasting. Deglutarylated by SIRT5 at Lys-55, Lys-219, Lys-412, Lys-889, Lys-892, Lys-915, Lys-1360 and Lys-1486, leading to activation. [UniProt]
Cellular Localization	Finely granular cytoplasmic. [UniProt]

Images



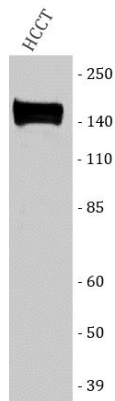
ARG45459 anti-CPS1 antibody IHC-P image

Immunohistochemistry: Human liver cancer stained with ARG45459 anti-CPS1 antibody at 2 µg/ml dilution.



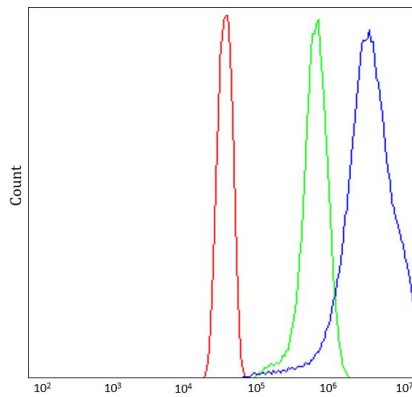
ARG45459 anti-CPS1 antibody ICC/IF image

Immunofluorescence: HeLa stained with ARG45459 anti-CPS1 antibody at 5 µg/ml dilution.



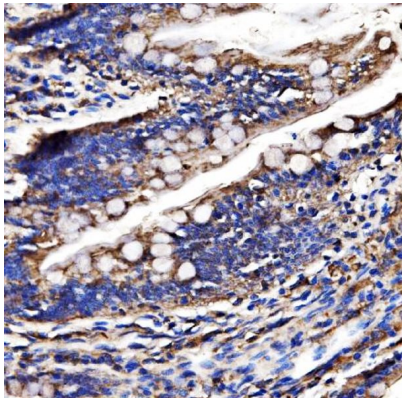
ARG45459 anti-CPS1 antibody WB image

Western blot: HCCT stained with ARG45459 anti-CPS1 antibody at 0.5 µg/ml dilution.



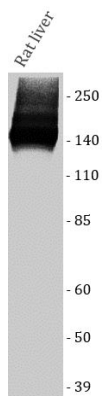
ARG45459 anti-CPS1 antibody FACS image

Flow Cytometry: HeLa stained with ARG45459 anti-CPS1 antibody at 1 µg/10⁶ cells dilution.



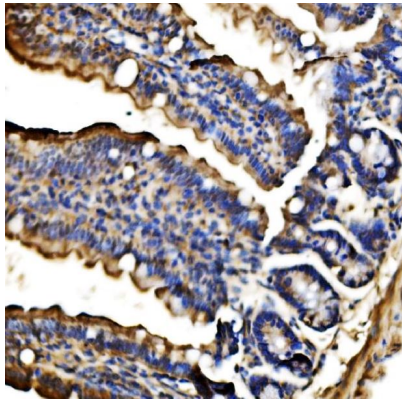
ARG45459 anti-CPS1 antibody IHC-P image

Immunohistochemistry: Rat colon stained with ARG45459 anti-CPS1 antibody at 2 µg/ml dilution.



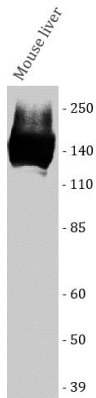
ARG45459 anti-CPS1 antibody WB image

Western blot: Rat liver stained with ARG45459 anti-CPS1 antibody at 0.5 µg/ml dilution.



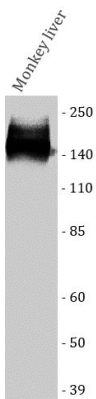
ARG45459 anti-CPS1 antibody IHC-P image

Immunohistochemistry: Mouse colon stained with ARG45459 anti-CPS1 antibody at 2 µg/ml dilution.



ARG45459 anti-CPS1 antibody WB image

Western blot: Mouse liver stained with ARG45459 anti-CPS1 antibody at 0.5 µg/ml dilution.



ARG45459 anti-CPS1 antibody WB image

Western blot: Monkey liver stained with ARG45459 anti-CPS1 antibody at 0.5 µg/ml dilution.