

### **Catalog #: 61251**

#### **Aliases**

CPS1; Carbamoyl-Phosphate Synthase 1; GATD6; Carbamoyl-Phosphate Synthase [Ammonia], Mitochondrial; Carbamoyl-Phosphate Synthase 1, Mitochondrial; Carbamoyl-Phosphate Synthase (Ammonia); EC 6.3.4.16; Carbamoyl-Phosphate Synthetase 1, Mitochondrial; Carbamoyl-Phosphate Synthetase I; CPSASE1; PHN

### **Background**

Gene Name: CPS1

NCBI Gene Entry: 1373 UniProt Entry: P31327

### **Application Information**

Molecular Weight: Predicted, 165 kDa, observed, 150 kDa

Clonality: Rabbit monoclonal antibody

Clone ID: 23GB2365

Species Reactivity: Human

Applications Tested: Western blotting (WB), flow cytometry (FCM), immunocytochemistry (IC)

#### **Immunogen**

A synthesized peptide derived from human CPS1

#### **Isotype**

Rabbit IgG

### **Storage Buffer**

Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.

#### **Storage**

Store at -20 °C for one year.

#### **Recommended Dilutions**

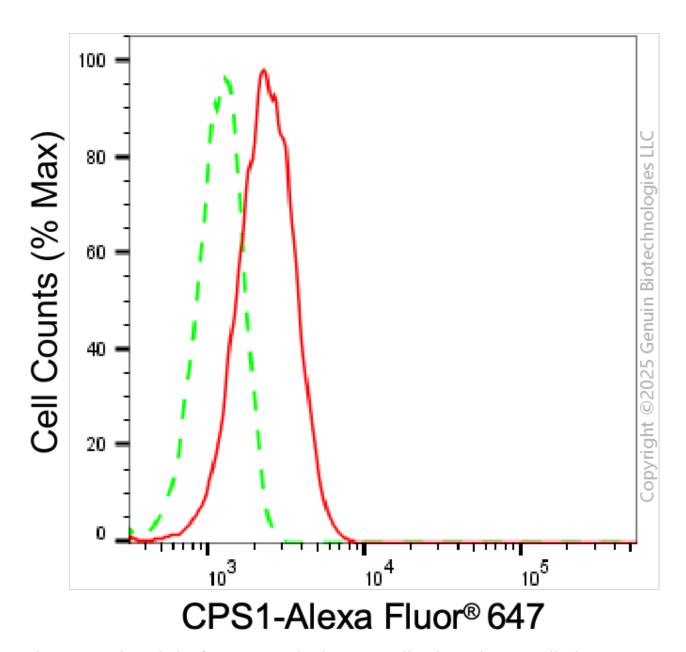
Western Blotting (WB): 1:1,000-1:5,000

Flow Cytometry (FCM): 1:2,000

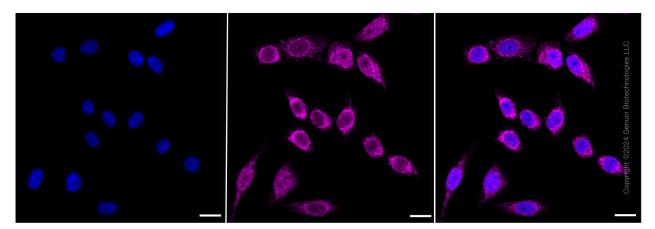
Immunocytochemistry (IC): 1:100-1:1,000

Note: This product is for research use only.

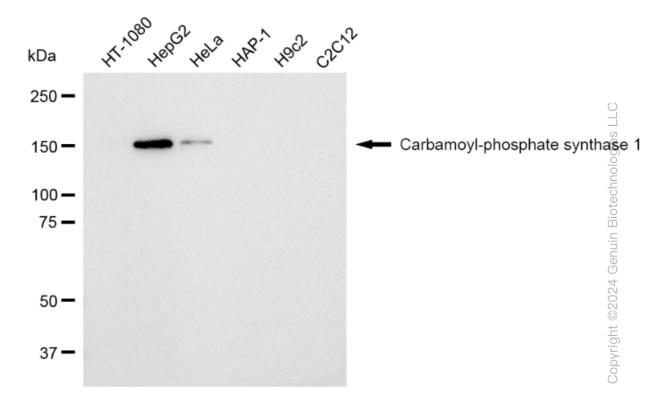
#### **Validation Data**



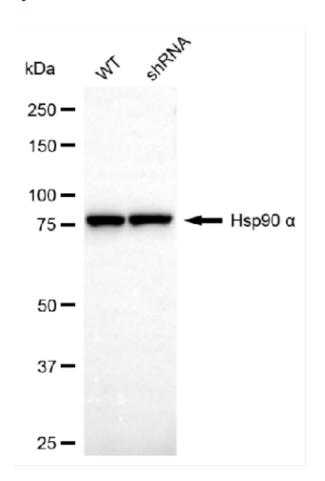
Flow cytometric analysis of CPS1 expression in HepG2 cells using anti-CPS1 antibody (Cat#61251, 1:2,000). Green, isotype control; red, CPS1.

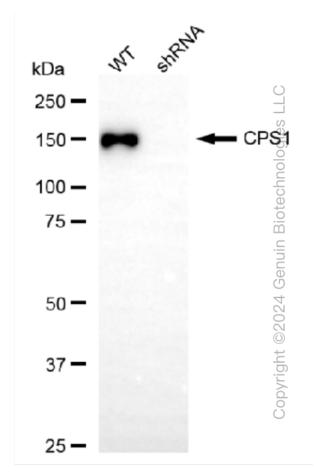


Immunocytochemical staining of HepG2 cells with Carbamoyl-phosphate synthase 1 antibody (Cat#61251, 1:1,000). Nuclei were stained blue with DAPI; Carbamoyl-phosphate synthase 1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: High. Scale bar: 20 µm.



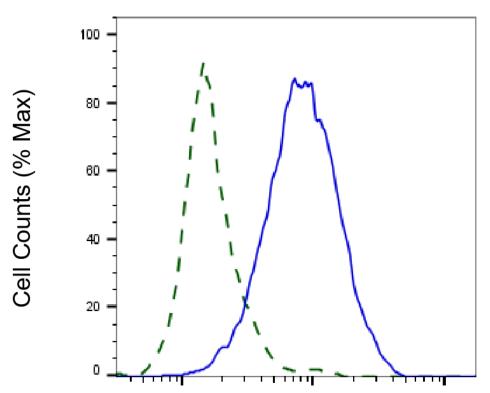
Western blotting analysis using anti-Carbamoyl-phosphate synthase 1 antibody (Cat#61251). Total cell lysates (30 μg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Carbamoyl-phosphate synthase 1 antibody (Cat#61251, 1: 5000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20000) respectively. Image was developed using FeQ<sup>TM</sup> ECL Substrate Kit (Cat#226).





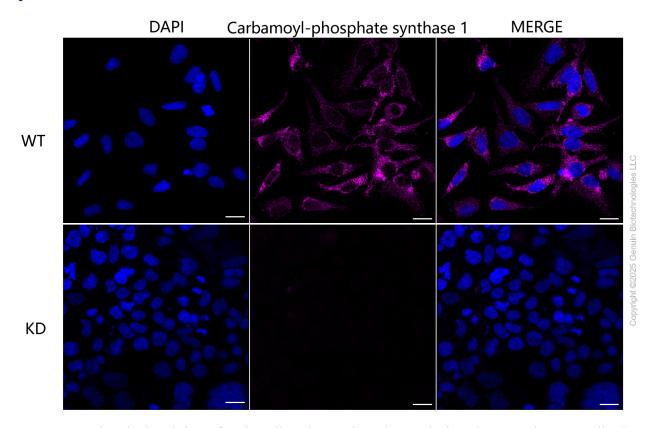
Western blotting analysis using anti-Carbamoyl-phosphate synthase 1 antibody (Cat#61251). Carbamoyl-phosphate synthase 1 expression in wild type (WT) and carbamoyl-phosphate synthase 1 shRNA knockdown (KD) HeLa cells with 30 μg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with anti-Carbamoyl-phosphate synthase 1 antibody (Cat#61251, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using FeQ<sup>TM</sup> ECL Substrate Kit (Cat#226).





### Carbamoyl-phosphate synthase 1-Alexa Fluor® 647

Validation of Carbamoyl-phosphate synthase 1 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with anti-Carbamoyl-phosphate synthase 1 antibody (Cat#61251, 1:2,000) and analyzed using BD flow cytometer.



Immunocytochemical staining of Hela cells using anti-Carbamoyl-phosphate synthase 1 antibody (Cat#61251, 1:1,000), Top panel: wild-type (WT); Bottom panal: Carbamoyl-phosphate synthase 1 shRNA knockdown (KD). Nuclei were stained blue with DAPI; Carbamoyl-phosphate synthase 1 was stained magenta with Alexa Fluor® 647. Scale bar, 20 μm.

TEL: +1-540-855-7041