

## Rabbit CPS1 Polyclonal Antibody | anti-CPS1 antibody

Anti-CPS1 Antibody Picoband

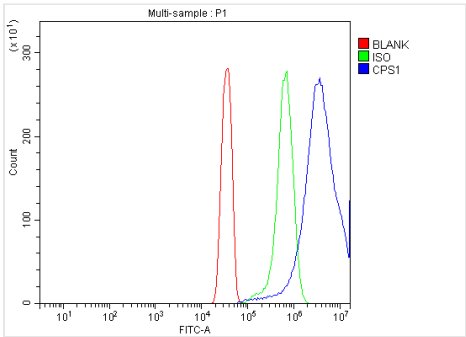
| CATALOG # | HOST   | REACTIVITY                | APPLICATIONS                                                                |
|-----------|--------|---------------------------|-----------------------------------------------------------------------------|
| AAA126131 | Rabbit | Human, Mouse, Rat, Monkey | ELISA, Flow Cytometry, Functional Assay, Immunohistochemistry, Western Blot |

### PRODUCT SYNONYMS

CPS1; Polyclonal Antibody; Anti-CPS1 Antibody Picoband; anti-CPS1 antibody

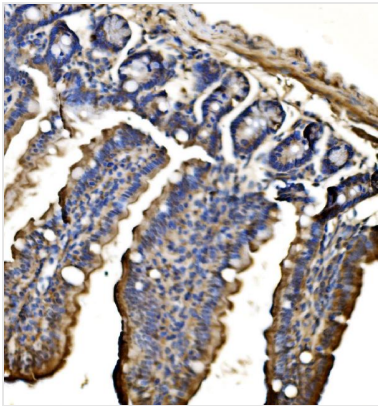
### PRODUCT SPECIFICATIONS

|                                                |                                                                                                                                                                                                                              |
|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                           | Rabbit                                                                                                                                                                                                                       |
| Reactivity                                     | Human, Mouse, Rat, Monkey                                                                                                                                                                                                    |
| Clonality                                      | Polyclonal                                                                                                                                                                                                                   |
| Isotype                                        | Rabbit IgG                                                                                                                                                                                                                   |
| Specificity                                    | Natural and recombinant Human CD34                                                                                                                                                                                           |
| Purity/Purification                            | Immunogen affinity purified.                                                                                                                                                                                                 |
| Form/Format                                    | Lyophilized<br>Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> .                                                                                                                     |
| Concentration                                  | Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml. (varies by lot)                                                                                                                                    |
| Applicable Applications for anti-CPS1 antibody | ELISA, FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry), WB (Western Blot)                                                                                                                                              |
| Samples                                        | Cell culture supernatants, serum and plasma (heparin, EDTA, citrate)                                                                                                                                                         |
| Detection Range                                | 156 pg/ml - 10,000 pg/ml                                                                                                                                                                                                     |
| Sensitivity                                    | <10 pg/ml                                                                                                                                                                                                                    |
| Intra-assay Precision                          | Intra-Assay Precision (Precision within an assay): Three samples of known concentration were tested on one plate to assess intra-assay precision.                                                                            |
| Inter-assay Precision                          | Inter-Assay Precision (Precision across assays): Three samples of known concentration were tested in separate assays to assess inter-assay precision.                                                                        |
| Preparation and Storage                        | Store at -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months. Avoid repeated freezing and thawing. |



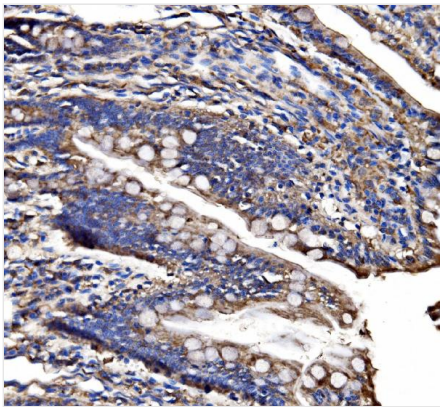
FCM/FACS (Flow Cytometry)

Figure 5. Flow Cytometry analysis of HeLa cells using anti-CPS1 antibody (AAA126131).Overlay histogram showing HeLa cells stained with AAA126131 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-CPS1 Antibody (AAA126131, 1 ug/1x10^6 cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10^6) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



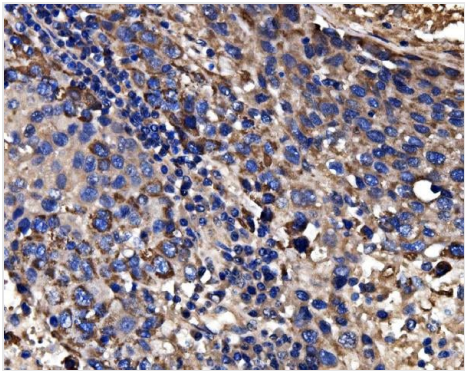
IHC (Immunohistochemisry)

Figure 3. IHC analysis of CPS1 using anti-CPS1 antibody (AAA126131).CPS1 was detected in a paraffin-embedded section of mouse colon tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-CPS1 Antibody (AAA126131) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



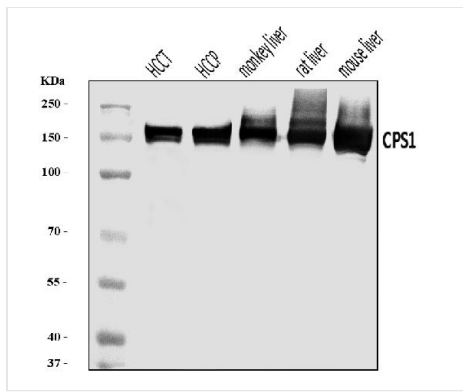
IHC (Immunohistochemistry)

Figure 4. IHC analysis of CPS1 using anti-CPS1 antibody (AAA126131).CPS1 was detected in a paraffin-embedded section of rat colon tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-CPS1 Antibody (AAA126131) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



IHC (Immunohiostchemistry)

Figure 2. IHC analysis of CPS1 using anti-CPS1 antibody (AAA126131).CPS1 was detected in a paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-CPS1 Antibody (AAA126131) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



#### WB (Western Blot)

Figure 1. Western blot analysis of CPS1 using anti-CPS1 antibody (AAA126131). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human HCCT tissue lysates, Lane 2: human HCCP tissue lysates, Lane 3: monkey liver tissue lysates, Lane 4: rat liver tissue lysates, Lane 5: mouse liver tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-CPS1 antigen affinity purified polyclonal antibody (#AAA126131) at 0.25 ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for CPS1 at approximately 165 kDa. The expected band size for CPS1 is at 165 kDa.

### ADDITIONAL INFORMATION

|                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Related Product Information for anti-CPS1 antibody</b> | <p>Background: CD34 is a transmembrane phosphoglycoprotein protein encoded by the CD34 gene in humans, mice, rats and other species. The protein encoded by this gene may play a role in the attachment of stem cells to the bone marrow extracellular matrix or to stromal cells. This single-pass membrane protein is highly glycosylated and phosphorylated by protein kinase C. Two transcript variants encoding different isoforms have been found for this gene.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                                           | <p>Principle of the Assay: The Picokine™ Human CD34 Pre-Coated ELISA (Enzyme-Linked Immunosorbent Assay) kit is a solid-phase immunoassay specially designed to measure Human CD34 with a 96-well strip plate that is pre-coated with antibody specific for CD34. The detection antibody is a biotinylated antibody specific for CD34. The capture antibody is a monoclonal antibody from mouse and the detection antibody is a biotinylated polyclonal antibody from goat. The kit contains recombinant Human CD34 with immunogen: Expression system for standard: NS0; Immunogen sequence: S32-T290. The kit is analytically validated with ready-to-use reagents. To measure Human CD34, add standards and samples to the wells, then add the biotinylated detection antibody. Wash the wells with PBS or TBS buffer, and add Avidin-Biotin-Peroxidase Complex (ABC-HRP). Wash away the unbounded ABC-HRP with PBS or TBS buffer and add TMB. TMB is an HRP substrate and will be catalyzed to produce a blue color product, which changes into yellow after adding the acidic stop solution. The absorbance of the yellow product at 450nm is linearly proportional to Human CD34 in the sample. Read the absorbance of the yellow product in each well using a plate reader, and benchmark the sample wells' readings against the standard curve to determine the concentration of Human CD34 in the sample.</p> |
| <b>Product Categories/Family for anti-CPS1 antibody</b>   | <p>Primary Antibodies, Rabbit Polyclonal Antibodies</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

### NCBI AND UNIPROT INFORMATION

|                                  |                                                               |
|----------------------------------|---------------------------------------------------------------|
| <b>NCBI GI #</b>                 | <p>21361331</p>                                               |
| <b>NCBI GeneID</b>               | <p>1373</p>                                                   |
| <b>NCBI Accession #</b>          | <p>NP_001866.2</p>                                            |
| <b>NCBI GenBank Nucleotide #</b> | <p>NM_001875.4</p>                                            |
| <b>UniProt Accession #</b>       | <p>P31327; O43774; Q53TL5; Q59HF8; Q7Z5I5; B7Z818; J3KQL0</p> |

|                                  |                                                                                                                                               |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Molecular Weight                 | 165,650 Da                                                                                                                                    |
| NCBI Official Full Name          | carbamoyl-phosphate synthase                                                                                                                  |
| NCBI Official Synonym Full Names | carbamoyl-phosphate synthase 1, mitochondrial                                                                                                 |
| NCBI Official Symbol             | CPS1                                                                                                                                          |
| NCBI Official Synonym Symbols    | PHN; CPSASE1                                                                                                                                  |
| NCBI Protein Information         | carbamoyl-phosphate synthase [ammonia], mitochondrial; carbamoyl-phosphate synthase [ammonia], mitochondrial; carbamoylphosphate synthetase I |
| UniProt Protein Name             | Carbamoyl-phosphate synthase [ammonia], mitochondrial                                                                                         |
| UniProt Gene Name                | <b>CPS1</b>                                                                                                                                   |
| UniProt Synonym Gene Names       | CPSase I                                                                                                                                      |
| UniProt Entry Name               | CPSM_HUMAN                                                                                                                                    |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/cps1-antibody-flow-cytometry-immunohistochemistry-western-blot-elisa/126131>