# Recombinant Human ASS1/Argininosuccinate synthase

## Catalog No: CE20

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| **Description** | Recombinant Human Argininosuccinate Synthase is produced by our E.coli expression system and the target gene encoding Met1-Lys412 is expressed with a 6His tag at the N-terminus. |
| **Expression System** | E.coli |
| **Alternative name** | Argininosuccinate Synthase; Citrulline--Aspartate Ligase; ASS1; ASS |
| **Accession No.** | P00966 |
| **Predicted Molecular Weight** | 42.8kDa |
| **Apparent Molecular Weight** | 50kDa, reducing conditions. |
| **Quality Control** | Purity: greater than 95% as determined by reducing SDS-PAGE.<br>Endotoxin: less than 0.1 ng/μg (1 EU/μg) as determined by LAL test. |
| **Formulation** | Supplied as a 0.2 μm filtered solution of 20mM PB, 150mM NaCl, 50mM Imidazole, 1mM DTT, 40% Glycerol, pH 7.5. |
| **Shipping** | The product is shipped on dry ice pack.<br>Upon receipt, store it immediately at the temperature listed below. |
| **Storage** | Store at ≤-70°C, stable for 6 months after receipt.<br>Store at ≤-70°C, stable for 3 months under sterile conditions after opening.<br>Please minimize freeze-thaw cycles. |
| **Background** | Argininosuccinate Synthase (ASS1) is an urea cycle enzyme with a tetrameric structure composed of identical subunits. ASS1 is involved in the synthesis of arginine and catalyzes that condensation of citrulline and aspartate to argininosuccinate using ATP. ASS1 is important to the urea cycle as it catalyzes the important second last step in the arginine biosynthetic pathway. ASS1 mainly expressed in periportal hepatocytes, but also in most other body tissues. A deficiency of ASS1 causes citrullinemia (CTLN1), an autosomal recessive disease which is characterized by severe vomiting spells and mental retardation. |

**SDS-PAGE**