



Recombinant Protein Technical Manual

Recombinant Human ASS1 Protein (His Tag)

RPES3002

Product Data:

Product SKU: RPES3002

Size: 10µg

Species: Human

Expression host: E. coli

Uniprot: P00966

Protein Information:

Molecular Mass: 42.8 kDa

AP Molecular Mass: 50 kDa

Tag: N-6His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

Shipping: This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.

Formulation: Supplied as a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, 50mM Imidazole, 1mM DTT, 40% Glycerol, pH 7.5.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Argininosuccinate Synthase; Citrulline--Aspartate Ligase; ASS1; ASS

Immunogen Information:

Sequence: Met 1-Lys412

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.