

## Recombinant Human ASS1 Protein (His Tag)

Catalog No. PKSH032092

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

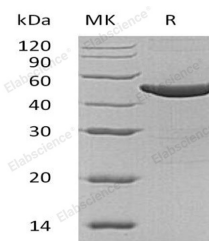
### Description

<b>Synonyms</b>	Argininosuccinate Synthase;Citrulline--Aspartate Ligase;ASS1;ASS
<b>Species</b>	Human
<b>Expression Host</b>	E.coli
<b>Sequence</b>	Met 1-Lys412
<b>Accession</b>	P00966
<b>Calculated Molecular Weight</b>	42.8 kDa
<b>Observed molecular weight</b>	50 kDa
<b>Tag</b>	N-His
<b>Bioactivity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
<b>Shipping</b>	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.
<b>Formulation</b>	Supplied as a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, 50mM Imidazole, 1mM DTT, 40% Glycerol, pH 7.5.
<b>Reconstitution</b>	Not Applicable

### Data



> 95 % as determined by reducing SDS-PAGE.

### 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

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vomiting spells and mental retardation.