

Recombinant Human ACLY/acly/ATP citrate lyase Protein (His Tag)

Catalog No. PKSH031004

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

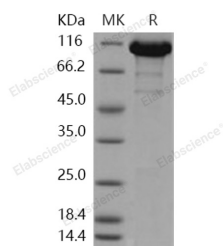
Description

Synonyms	ACL;ATPCL;CLATP
Species	Human
Expression Host	Baculovirus-Insect Cells
Sequence	Met 1-Met 1101
Accession	P53396
Calculated Molecular Weight	123 kDa
Observed molecular weight	110 kDa
Tag	N-His
Bioactivity	Not validated for activity

Properties

Purity	> 90 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile 20mM Tris, 500mM NaCl, pH 8.0, 10% glycerol Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 90 % as determined by reducing SDS-PAGE.

Background

ATP citrate lyase, also known as Acly or Acl, is the primary enzyme responsible for the synthesis of cytosolic acetyl-CoA in many tissues. The enzyme is composed of two polymer chains which are polypeptides in human. ATP citrate lyase is

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responsible for catalyzing the conversion of citrate and CoA into acetyl-CoA and oxaloacetate, along with the hydrolysis of ATP. A definitive role for ATP citrate lyase in tumorigenesis has emerged from ATP citrate lyase RNAi and chemical inhibitor studies, showing that ATP citrate lyase inhibition limits tumor cell proliferation and survival and induces differentiation in vitro. In vivo, it reduces tumor growth leading to a cytostatic effect and induces differentiation.