

DATASHEET

Version: 2016-08-17

AMPK Alpha-1 Chain Antibody, pAb, Rabbit

Cat. No.: A00893-40

Size: 40 μg

Synonyms: Rabbit Anti-AMPK alpha-1 chain pAb;

Description:

AMPK alpha-1 chain (5-AMP-activated protein kinase catalytic subunit alpha-1) is responsible for the regulation of fatty acid synthesis by phosphorylation of acetyl-CoA carboxylase. It also regulates cholesterol synthesis via phosphorylation and inactivation of hormone-sensitive lipase and hydroxymethylglutaryl-CoA reductase. It appears to act as a metabolic stress-sensing protein kinase switching off biosynthetic pathways when cellular ATP levels are depleted and when 5-AMP rises in response to fuel limitation and/or hypoxia. It is expressed in kidney, liver, lung, heart, and brain tissues.

GenScript Rabbit Anti-AMPK Alpha-1 Chain Polyclonal Antibody is developed in rabbit using a synthetic peptide conjugated to KLH.

GenScript Rabbit Anti-AMPK Alpha-1 Chain Polyclonal Antibody is highly purified from rabbit hosts antiserum by immunoaffinity chromatography.

Immunogen: Synthetic peptide TSPPDSFLDDHHLTR

conjugated to KLH

Antigen Synonyms: Mouse Conjugation: Unconjugated

Formulation:

 $0.5\ \text{mg/ml}$ in PBS, pH 7.4, containing 30% glycerol and 0.02%

sodium azide

Ig Subclass: Rabbit IgG

Specificity: GenScript Rabbit Anti-AMPK Alpha-1 Chain Polyclonal Antibody reacts with mouse AMPK alpha-1 chain. Sequence homology predicts that it will also react with human and rat AMPK alpha-1 chain.

Purification: Immunoaffinity chromatography

Applications:

Working concentrations for specific applications should be determined by the investigator. The appropriate concentrations may be affected by secondary antibody affinity, antigen concentration, the sensitivity of the method of detection, temperature, the length of the incubations, and other factors. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

ELISA: 0.05-0.2 μg/ml **Western blot:** 1.0 μg/ml

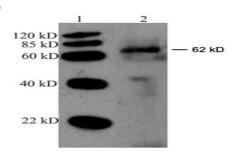
Western Blot Using ONE-HOUR Western[™] Kit: For quick results, we recommend the GenScript ONE-HOUR Western[™] Kit (L00204C). Mix 10 µg of this antibody with 10 ml of WB solution for an 8 cm x 8 cm membrane.

Other applications: user-optimized

Storage:

The antibody is stable for 2-3 weeks if stored at 2-8°C. For long term storage, aliquot and store at -20°C or below. Avoid repeated freezing and thawing cycles.

Example



Lane 1: Smart Protein Standard (Middle-Range) (GenScript, MM0900)

Lane 2: 50 µg Mouse heart tissue lysate

Primary antibody: 1 µg/ml Rabbit Anti-AMPK Alpha-1 Chain Polyclonal Antibody (GenScript, A00893)

Secondary antibody: Goat Anti-Rabbit IgG (H&L) [HRP] Polyclonal Antibody (GenScript, A00098, 1:10,000)