10320 Camino Santa Fe, Suite A
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# ACLY Antibody (C-term) Blocking Peptide

**Synthetic peptide**
**Catalog # BP6784b**

## Specification

### ACLY Antibody (C-term) Blocking Peptide - Product Information

Primary Accession P53396

### ACLY Antibody (C-term) Blocking Peptide - Additional Information

**Gene ID** 47

**Other Names**
ATP-citrate synthase, ATP-citrate (pro-S-)-lyase, ACL, Citrate cleavage enzyme, ACLY

**Target/Specificity**
The synthetic peptide sequence used to generate the antibody <a href=/products/AP6784b>AP6784b</a> was selected from the C-term region of human ACLY. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

### ACLY Antibody (C-term) Blocking Peptide - Protein Information

**Name** ACLY

**Function**
Catalyzes the cleavage of citrate into oxaloacetate and acetyl-CoA, the latter serving as common substrate in multiple biochemical reactions in protein, carbohydrate and lipid metabolism.

**Cellular Location**
Cytoplasm, cytosol.

### ACLY Antibody (C-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

## ACLY Antibody (C-term) Blocking Peptide - Images

## ACLY Antibody (C-term) Blocking Peptide - Background

ATP citrate lyase is the primary enzyme responsible for the synthesis of cytosolic acetyl-CoA in many tissues. The enzyme is a tetramer (relative molecular weight approximately 440,000) of apparently identical subunits. It catalyzes the formation of acetyl-CoA and oxaloacetate from citrate and CoA with a concomitant hydrolysis of ATP to ADP and phosphate. The product, acetyl-CoA, serves several important biosynthetic pathways, including lipogenesis and cholesterogenesis. In nervous tissue, ATP citrate-lyase may be involved in the biosynthesis of acetylcholine.

## ACLY Antibody (C-term) Blocking Peptide - References

Wellen,K.E., et.al., Science 324 (5930), 1076-1080 (2009)