

# ACY1 Rabbit pAb

Catalog No.: A13458

## Basic Information

**Observed MW**

46kDa

**Calculated MW**

46kDa

**Category**

Primary antibody

**Applications**

ELISA,WB,IHC-P,IF/ICC

**Cross-Reactivity**

Human, Mouse, Rat

## Background

This gene encodes a cytosolic, homodimeric, zinc-binding enzyme that catalyzes the hydrolysis of acylated L-amino acids to L-amino acids and an acyl group, and has been postulated to function in the catabolism and salvage of acylated amino acids. This gene is located on chromosome 3p21.1, a region reduced to homozygosity in small-cell lung cancer (SCLC), and its expression has been reported to be reduced or undetectable in SCLC cell lines and tumors. The amino acid sequence of human aminoacylase-1 is highly homologous to the porcine counterpart, and this enzyme is the first member of a new family of zinc-binding enzymes. Mutations in this gene cause aminoacylase-1 deficiency, a metabolic disorder characterized by central nervous system defects and increased urinary excretion of N-acetylated amino acids. Alternative splicing of this gene results in multiple transcript variants. Read-through transcription also exists between this gene and the upstream ABHD14A (abhydrolase domain containing 14A) gene, as represented in GeneID:100526760. A related pseudogene has been identified on chromosome 18.

## Recommended Dilutions

<b>WB</b>	1:500 - 1:2000
<b>IHC-P</b>	1:50 - 1:200
<b>IF/ICC</b>	1:50 - 1:200

## Immunogen Information

<b>Gene ID</b>	<b>Swiss Prot</b>
95	Q03154

**Immunogen**

Recombinant fusion protein containing a sequence corresponding to amino acids 1-408 of human ACY1 (NP\_001185824.1).

**Synonyms**

ACY-1; ACY1D; HEL-S-5; ACY1

## Contact

 | [www.abclonal.com](http://www.abclonal.com)

## Product Information

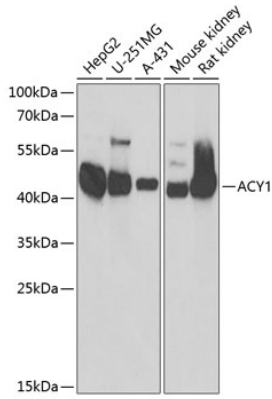
<b>Source</b>	<b>Isotype</b>	<b>Purification</b>
Rabbit	IgG	Affinity purification

**Storage**

Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.02% sodium azide,50% glycerol,pH7.3.

## Validation Data

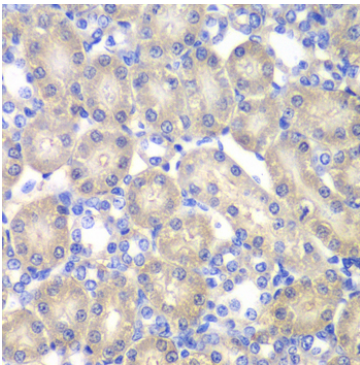


Western blot analysis of extracts of various cell lines, using ACY1 antibody (A13458) at 1:1000 dilution.

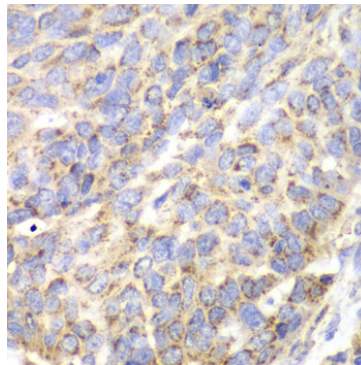
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

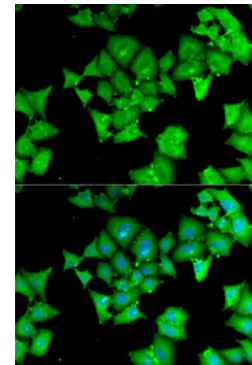
Blocking buffer: 3% nonfat dry milk in TBST.



Immunohistochemistry analysis of paraffin-embedded rat kidney using ACY1 antibody (A13458) at dilution of 1:100 (40x lens). Perform microwave antigen retrieval with 10 mM PBS buffer pH 7.2 before commencing with IHC staining protocol.



Immunohistochemistry analysis of paraffin-embedded human esophageal cancer using ACY1 antibody (A13458) at dilution of 1:100 (40x lens). Perform microwave antigen retrieval with 10 mM PBS buffer pH 7.2 before commencing with IHC staining protocol.



Immunofluorescence analysis of MCF7 cells using ACY1 antibody (A13458). Blue: DAPI for nuclear staining.