

## Recombinant ACY1/Aminoacylase-1 Monoclonal Antibody

catalog number: AN300342P

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

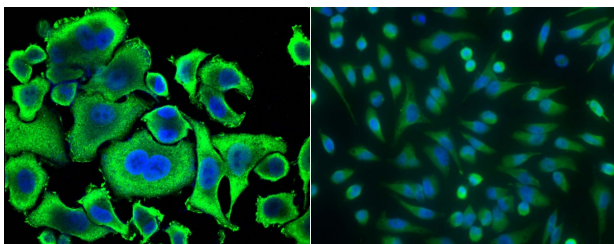
### Description

<b>Reactivity</b>	Human
<b>Immunogen</b>	Recombinant Human ACY1/Aminoacylase-1 protein
<b>Host</b>	Rabbit
<b>Isotype</b>	IgG
<b>Clone</b>	6G14
<b>Purification</b>	Protein A
<b>Buffer</b>	0.2 µm filtered solution in PBS

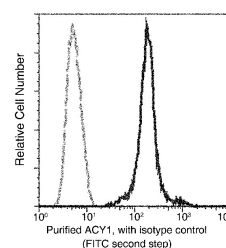
### Applications Recommended Dilution

<b>ICC/IF</b>	1:20-1:100
<b>FCM</b>	1:25-1:100

### Data



Immunofluorescence analysis of Human ACY1 in HeLa or SKBR3 cells. Cells were fixed with 4% PFA, permeabilized with 1% Triton X-100 in PBS, blocked with 10% serum, and incubated with Rabbit anti-Human ACY1 monoclonal antibody (1:60). Then cells were stained with the Alexa Fluor® 488-conjugated Goat Anti-rabbit IgG secondary antibody (left panel, captured by laser confocal scanning microscope; right panel, captured by fluorescence microscope), counterstained with DAPI (blue). Positive staining was localized to cytoplasm.



Flow cytometric analysis of Human ACY1 expression on HepG2 cells. The cells were treated according to manufacturer's manual, stained with purified anti-Human ACY1, then a FITC-conjugated second step antibody. The fluorescence histograms were derived from gated events with the forward and side light-scatter characteristics of intact cells.

### Preparation & Storage

<b>Storage</b>	This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. Preservative-Free. Avoid repeated freeze-thaw cycles.
<b>Shipping</b>	Ice bag

### Background

#### For Research Use Only

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.