



Rabbit Anti-Human ACY1 Polyclonal Antibody (CABT-L2195)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	Polyclonal Antibody to Aminoacylase 1 (Knockout Validated)
Specificity	The antibody is a rabbit polyclonal antibody raised against ACY1. It has been selected for its ability to recognize ACY1 in immunohistochemical staining and western blotting.
Target	ACY1
Immunogen	Recombinant fragment corresponding to human ACY1 (Thr2~Ser408)
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human, Pig
Purification	Antigen-specific affinity chromatography followed by Protein A affinity chromatography
Conjugate	Unconjugated
Applications	WB
Format	Liquid
Concentration	Lot specific
Size	200 µg
Buffer	Supplied as solution form in 0.01M PBS with 50% glycerol, pH7.4.
Preservative	0.05% Proclin-300

Storage	Avoid repeated freeze/thaw cycles. Store at 4°C for frequent use. Aliquot and store at -20°C for 12 months.
Ship	4°C with ice bags

BACKGROUND

Introduction	<p>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 GenelD:100526760. A related pseudogene has been identified on chromosome 18. [provided by RefSeq, Nov 2010]</p>
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Keywords	ACY1-D;ACY1D;ACYLASE;N-acyl-L-amino-acid amidohydrolase
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GENE INFORMATION

Gene Name	ACY1 aminoacylase 1 [Homo sapiens (human)]
Official Symbol	ACY1
Synonyms	ACY1; aminoacylase 1; ACY-1; ACY1D; HEL-S-5; aminoacylase-1; acylase; epididymis secretory protein Li 5; N-acyl-L-amino-acid amidohydrolase;
Entrez Gene ID	95
Protein Refseq	NP_000657
UniProt ID	Q03154
Chromosome Location	3p21.1
Pathway	2-Oxocarboxylic acid metabolism; Aflatoxin activation and detoxification; Arginine and proline metabolism; Biological oxidations; Biosynthesis of amino acids; Defective ACY1 causes encephalopathy; Disease; Metabolic disorders of biological oxidation enzymes;

Function

aminoacylase activity; metal ion binding; metallopeptidase activity;
