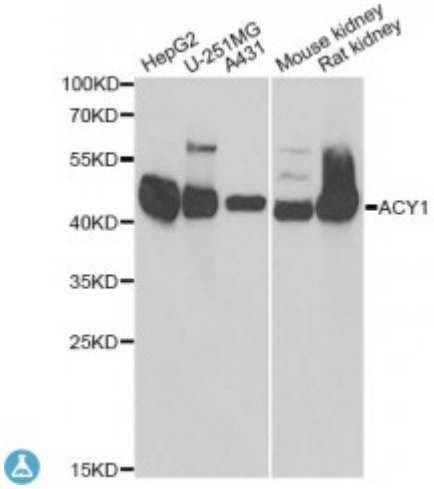
Anti-ACY1 Antibody



Description	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.

Model	STJ115419
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	IF, IHC, WB
Immunogen	Recombinant fusion protein containing a sequence corresponding to amino acids 1-408 of human ACY1 (NP_001185824.1).
Gene ID	95
Gene Symbol	ACY1

Dilution range	WB 1:500 - 1:2000 IHC 1:50 - 1:200 IF 1:50 - 1:200
Tissue Specificity	Expression is highest in kidney, strong in brain and weaker in placenta and spleen
Purification	Affinity purification
Note	For Research Use Only (RUO).
Protein Name	Aminoacylase-1 ACY-1
Molecular Weight	45.885 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage Instruction	Store at -20C. Avoid freeze / thaw cycles.
Database Links	HGNC:177OMIM:104620Reactome:R-HSA-5423646
Alternative Names	Aminoacylase-1 ACY-1
Function	Involved in the hydrolysis of N-acylated or N-acetylated amino acids (except L-aspartate),
Cellular Localization	Cytoplasm