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Rabbit Anti-Aminoacylase 1 antibody

SL6019R

Product Name:	Aminoacylase 1
Chinese Name:	氨基酰化酶1抗体
Alias:	ACY 1; ACY1; ACY1D; ACYLASE; EC 3.5.1.14; N acyl L amino acid amidohydrolase; ACY1_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Pig,Cow,Horse,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	46kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human ACY1/Aminoacylase 1:201-300/408
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Aminoacylase 1 is a cytosolic, homodimeric, zinc binding enzyme that catalyzes the hydrolysis of acylated L amino acids to L amino acids and acyl group, and has been postulated to function in the catabolism and salvage of acylated amino acids. ACY1 has been assigned to 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 ACY1 is the first member of a new family of zinc binding enzymes.

Function:
Involved in the hydrolysis of N-acylated or N-acetylated amino acids (except L-aspartate).

Subunit:
Homodimer. Interacts with SPHK1.

Subcellular Location:
Cytoplasm.

Tissue Specificity:
Expression is highest in kidney, strong in brain and weaker in placenta and spleen.

DISEASE:
Defects in ACY1 are the cause of aminoacylase-1 deficiency (ACY1D) [MIM:609924]. ACY1D results in a metabolic disorder manifesting with encephalopathy, unspecific psychomotor delay, psychomotor delay with atrophy of the vermis and syringomyelia, marked muscular hypotonia or normal clinical features. Epileptic seizures are a frequent feature. All affected individuals exhibit markedly increased urinary excretion of several N-acetylated amino acids.

Similarity:
Belongs to the peptidase M20A family.

SWISS:
Q03154

Gene ID:
95

Database links:

Entrez Gene: 768058Cow

Entrez Gene: 95Human

Entrez Gene: 109652Mouse

Entrez Gene: 396930Pig

Entrez Gene: 300981Rat

Omim: 104620Human

	SwissProt: Q03154Human SwissProt: Q99JW2Mouse SwissProt: P37111Pig SwissProt: Q6AYS7Rat Unigene: 334707Human Unigene: 7165Mouse Unigene: 3679Rat **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.