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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.
Research Area	immunology Signal transduction Channel protein The new supersedes the old
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Rat(predicted:Human,Mouse,Pig,Cow,Horse)
Applications	WB=1:500-2000 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	46kDa
Cellular localization	cytoplasmic
Form	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
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
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: 768058 Cow

Entrez Gene: 95 Human

Entrez Gene: 109652 Mouse

Entrez Gene: 396930 Pig

Entrez Gene: 300981 Rat

Omim: 104620 Human

SwissProt: Q03154 Human

SwissProt: Q99JW2 Mouse

SwissProt: P37111 Pig

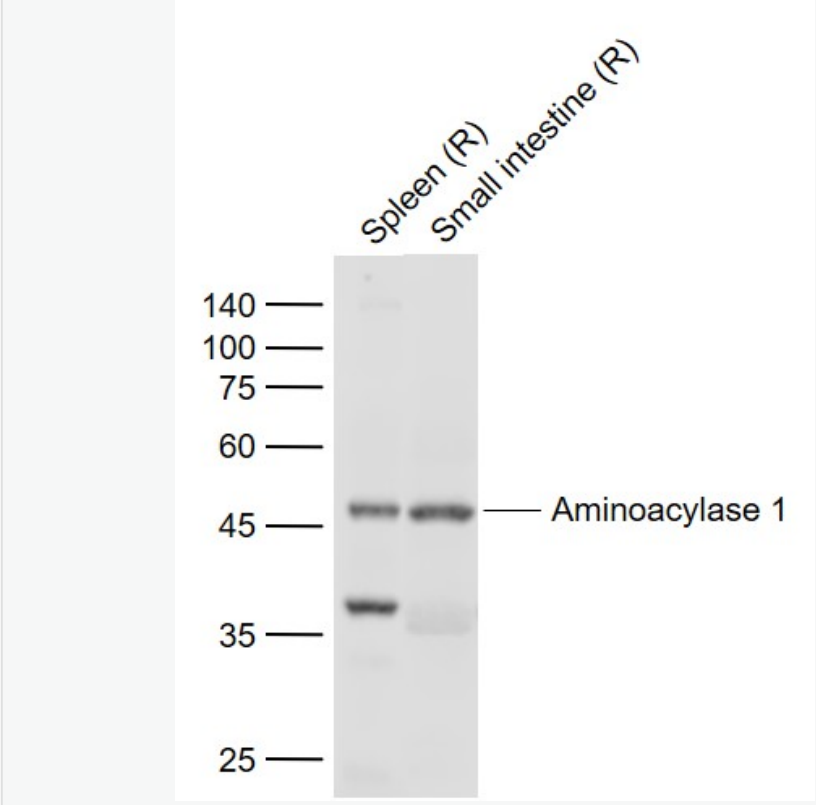
SwissProt: Q6AYS7 Rat

Unigene: 334707 Human

Unigene: 7165 Mouse

Unigene: 3679 Rat

Product Picture



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Sample:

Lane 1: Spleen (Rat) Lysate at 40 ug

Lane 2: Small intestine (Rat) Lysate at 40 ug

Primary: Anti-Aminoacylase 1 (SL6019R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 46 kD

Observed band size: 46 kD