

Rabbit anti-Mouse Aminoacylase 1 Polyclonal Antibody | anti-ACY1 antibody

Anti-Aminoacylase 1 Antibody, Rabbit Polyclonal

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA257048	Rabbit	Mouse	Immunoprecipitation, Immunohistochemistry, ELISA, Western Blot

PRODUCT SYNONYMS

Aminoacylase 1; Polyclonal Antibody; Anti-Aminoacylase 1 Antibody; Rabbit Polyclonal; Aminoacylase-1/ACY1 Antibody; Rabbit PAb; Antigen Affinity Purified; aminoacylase 1; Anti-1110014J22Rik Antibody; Anti-Acy-1 Antibody; anti-ACY1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Mouse
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Mouse Aminoacylase-1/ACY1
Purity/Purification	Protein A & Antigen Affinity
Form/Format	Liquid; 0.2um filtered solution in PBS
Applicable Applications for anti-ACY1 antibody	IP (Immunoprecipitation), IHC (Immunohistochemistry), ELISA, WB (Western Blot)
Immunogen	Recombinant Mouse Aminoacylase-1/ACY1 Protein
Conjugation	Unconjugated
Preparation	Produced in rabbits immunized with purified, recombinant Mouse Aminoacylase-1/ACY1 (rM Aminoacylase-1/ACY1). Aminoacylase-1/ACY1 specific IgG was purified by Mouse Aminoacylase-1/ACY1 affinity chromatography.
Preparation and Storage	This antibody can be stored at 2-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Preservative-Free. Avoid repeated freeze-thaw cycles.

IMAGES



IP (Immunoprecipitation)

Mouse ACY1 was immunoprecipitated using: Lane A: 0.5 mg K562 Whole Cell Lysate Lane B: 0.5 mg HepG2 Whole Cell Lysate 1 uL anti-Mouse ACY1 rabbit polyclonal antibody and 15 uL of 50 % Protein G agarose. Primary antibody: Anti-Mouse ACY1 rabbit polyclonal antibody, at 1:500 dilution Secondary antibody: Clean-Blot IP Detection Reagent (HRP) at 1:500 dilution Developed using the DAB staining technique. Performed under reducing conditions. Predicted band size: 46 kDa Observed band size: 46 kDa



IHC (Immunohistochemistry)

Immunochemical staining of mouse ACY1 in mouse brain with rabbit polyclonal antibody (1:5000, formalin-fixed paraffin embedded sections).



IHC (Immunohistochemistry)

Immunochemical staining of mouse ACY1 in mouse kidney with rabbit polyclonal antibody (1:5000, formalin-fixed paraffin embedded sections).



WB (Western Blot)

Anti-ACY1 rabbit polyclonal antibody at 1:500 dilution Lane A: K562 Whole Cell Lysate Lane B: HepG2 Whole Cell Lysate Lysates/proteins at 30 ug per lane. Secondary Goat Anti-Rabbit IgG H&L (Dylight 800) at 1/10000 dilution. Developed using the Odyssey technique. Performed under reducing conditions. Predicted band size: 46 kDa Observed band size: 46 kDa

ADDITIONAL INFORMATION

Related Product Information for anti-ACY1 antibody	Aminoacylase 1 (ACY1), a metalloenzyme that removes amide-linked ACY1 groups from amino acids and may play a role in regulating responses to oxidative stress. Both the C-terminal fragment found in the two-hybrid screen and full-length ACY1 co-immunoprecipitate with SphK1. Though both C-terminal and full-length proteins slightly reduce SphK1 activity measured in vitro, the C-terminal fragment inhibits while full-length ACY1 potentiates the effects of SphK1 on proliferation and apoptosis. It suggested that ACY1 physically interacts with SphK1 and may influence its physiological functions. As a homodimeric zinc-binding enzyme, Aminoacylase 1 catalyzes the hydrolysis of N alpha-acylated amino acids. Deficiency of Aminoacylase 1 due to mutations in the Aminoacylase 1 (ACY1) gene follows an autosomal-recessive trait of inheritance and is characterized by accumulation of N-acetyl amino acids in the urine.
References	Sommer A, et al. (2011) The molecular basis of aminoacylase 1 deficiency. Biochim Biophys Acta. 1812(6): 685-90. Maceyka M, et al. (2004) Aminoacylase 1 is a sphingosine kinase 1-interacting protein. FEBS Lett. 568(1-3): 30-4. Cook RM, et al. (1993) Human aminoacylase-1. Cloning, sequence, and expression analysis of a chromosome 3p21 gene inactivated in small cell lung cancer. J Biol Chem. 268(23): 17010-7.

NCBI AND UNIPROT INFORMATION

NCBI GI #	449784892
NCBI GeneID	109652
NCBI Accession #	NP_001263371.1
NCBI GenBank Nucleotide #	NM_001276442.1
UniProt Accession #	Q99JW2; Q9CR15
Molecular Weight	45,781 Da
NCBI Official Full Name	aminoacylase-1
NCBI Official Synonym Full Names	aminoacylase 1
NCBI Official Symbol	Acy1
NCBI Official Synonym Symbols	Acy-1; 1110014J22Rik
NCBI Protein Information	aminoacylase-1
UniProt Protein Name	Aminoacylase-1
UniProt Gene Name	Acy1
UniProt Synonym Gene Names	ACY-1
UniProt Entry Name	ACY1_MOUSE

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