

ARG57036
anti-ACY1 / Aminoacylase 1 antibody [1E2]Package: 50 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [1E2] recognizes ACY1 / Aminoacylase 1
Tested Reactivity	Hu
Tested Application	FACS, WB
Host	Mouse
Clonality	Monoclonal
Clone	1E2
Isotype	IgG2b, kappa
Target Name	ACY1 / Aminoacylase 1
Species	Human
Immunogen	Recombinant fragment around aa. 1-408 of Human Aminoacylase 1.
Conjugation	Un-conjugated
Alternate Names	ACY-1; N-acyl-L-amino-acid amidohydrolase; ACY1D; EC 3.5.1.14; HEL-S-5; Aminoacylase-1

Application Instructions

Application table	Application	Dilution
	FACS	Assay-dependent
	WB	1:250 - 1:500
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form	Liquid
Purification	Purification with Protein A.
Buffer	PBS (pH 7.4), 0.02% Sodium azide and 10% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	10% Glycerol
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links

[GeneID: 95 Human](#)

[Swiss-port # Q03154 Human](#)

Gene Symbol

ACY1

Gene Full Name

aminoacylase 1

Background

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. [provided by RefSeq, Nov 2010]

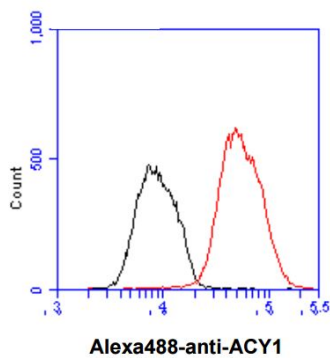
Function

Involved in the hydrolysis of N-acylated or N-acetylated amino acids (except L-aspartate). [UniProt]

Calculated Mw

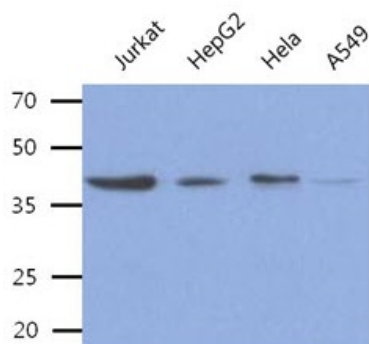
46 kDa

Images



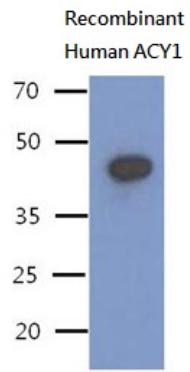
ARG57036 anti-ACY1 / Aminoacylase 1 antibody [1E2] FACS image

Flow Cytometry: Hep3B cells stained with ARG57036 anti-ACY1 / Aminoacylase 1 antibody [1E2] at 2-5 $\mu\text{g}/10^6$ cells (red line). Secondary antibody: Goat anti-Mouse IgG Alexa fluor 488 conjugate. Isotype control antibody was Mouse IgG (black line).



ARG57036 anti-ACY1 / Aminoacylase 1 antibody [1E2] WB image

Western blot: 40 μg of Jurkat, HepG2, HeLa, and A549 stained with ARG57036 anti-ACY1 / Aminoacylase 1 antibody [1E2] at 1:500.



ARG57036 anti-ACY1 / Aminoacylase 1 antibody [1E2] WB image

Western blot: 50 ng of Recombinant Human ACY1 stained with ARG57036 anti-ACY1 / Aminoacylase 1 antibody [1E2] at 1:1000.