

#94248
Store at -20°C**AHCYL1/IRBIT (D3A5G) Rabbit mAb**

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Applications: W, IP	Reactivity: H M R Mk	Sensitivity: Endogenous	MW (kDa): 61	Source/Isotype: Rabbit IgG	UniProt ID: #O43865	Entrez-Gene Id: 10768
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Product Usage Information	Application Western Blotting Immunoprecipitation	Dilution 1:1000 1:50
Storage	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.	
Specificity/Sensitivity	AHCYL1/IRBIT (D3A5G) Rabbit mAb recognizes endogenous levels of total AHCYL1/IRBIT protein. This antibody does not cross-react with AHCYL2/IRBIT2 protein.	
Source / Purification	Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Glu50 of human AHCYL1/IRBIT protein.	
Background	S-adenosylhomocysteine hydrolase-like protein 1 (AHCYL1) is a member of S-adenosylhomocysteine hydrolase family, which participates in the metabolism of S-adenosyl-L-homocysteine (1). Two <i>Drosophila</i> homologs of S-adenosylhomocysteine hydrolase-like proteins, dAhcyL1 and dAhcyL2, were identified as novel components of methionine metabolism (2). dAhcyL1 and dAhcyL2 function as dominant-negative regulators of S-adenosylhomocysteine hydrolase (2). Global down-regulation of both dAhcyL1 and dAhcyL2 extended life span (2). In addition, brain-specific down regulation of dAhcyL1 extended life span (2). AHCYL1 is also known as inositol 1,4,5-trisphosphate receptor (IP ₃) binding protein released with IP ₃ (IRBIT) (1, 3). This protein binds to the endoplasmic reticulum calcium release channel IP ₃ R and represses its activity (1, 3). As a multifunctional regulator, AHCYL1/IRBIT can also form a complex with and suppress the activity of ribonucleotide reductase, thereby influencing the balance of deoxynucleotide triphosphates essential for DNA replication and genomic integrity (4).	
Background References	1. Jeong, W. et al. (2012) <i>PLoS One</i> 7, e49204. 2. Parkhitko, A.A. et al. (2016) <i>Genes Dev</i> 30, 1409-22. 3. Kawai, K. et al. (2015) <i>Proc Natl Acad Sci U S A</i> 112, 5515-20. 4. Arnaoutov, A. and Dasso, M. (2014) <i>Science</i> 345, 1512-5.	

Species Reactivity	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
Western Blot Buffer	IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.
Applications Key	W: Western Blotting IP: Immunoprecipitation
Cross-Reactivity Key	H: Human M: Mouse R: Rat Mk: Monkey
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