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# L-asparaginase/ASRGL1 Antibody



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**For Research Use Only. Not for Use in Diagnostic Procedures.**

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H R Mk	Endogenous	41	Rabbit	#Q7L266	80150
<b>Product Usage Information</b>	<b>Application</b>					<b>Dilution</b>
	Western Blotting					1:1000
<b>Storage</b>	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.					
<b>Specificity/Sensitivity</b>	L-asparaginase/ASRGL1 Antibody recognizes endogenous levels of total L-asparaginase/ASRGL1 protein.					
<b>Source / Purification</b>	Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues near the carboxy terminus of human L-asparaginase/ASRGL1 protein. Antibodies are purified by protein A and peptide affinity chromatography.					
<b>Background</b>	L-asparaginase (ASRGL1) catalyzes the conversion of L-asparagine to L-aspartate. Research studies have shown that intracellular asparagine can suppress apoptosis in a large number of human tumors (1). In addition, acute lymphocytic leukemia cells frequently depend upon serum asparagine for their viability, as they lack asparagine synthetase (ASNS). Deprivation of asparagine by L-asparaginase has therefore been developed as a therapeutic treatment for acute lymphocytic leukemia (2-3). In <i>KRAS</i> mutant non-small cell lung carcinoma (NSCLC) cells, PI3K/Akt signaling was shown to be required for <i>ASNS</i> expression, suggesting combinatorial Akt inhibition and L-asparaginase treatment as a therapeutic strategy for NSCLC (3). Research studies on a breast cancer model have furthermore shown that restriction of asparagine can suppress cancer metastasis (4).					
<b>Background References</b>	1. Zhang, J. et al. (2014) <i>Mol Cell</i> 56, 205-18. 2. Loayza-Puch, F. et al. (2016) <i>Nature</i> 530, 490-4. 3. Gwinn, D.M. et al. (2018) <i>Cancer Cell</i> 33, 91-107.e6. 4. Knott, S.R.V. et al. (2018) <i>Nature</i> 554, 378-81.					

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