

## **Arginase-2 Antibody**



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

<b>Applications:</b> W, IP	<b>Reactivity:</b> H Mk	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 40	<b>Source/Isotype:</b> Rabbit	UniProt ID: #P78540	Entrez-Gene Id: 384
Product Usage Information		<b>Application</b> Western Blotting Immunoprecipitation		<b>Dilution</b> 1:1000 1:50		
Storage		Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 $\mu$ g/ml BSA and 50% glycerol. Store at – 20°C. Do not aliquot the antibody.				
Specificity/Sensitivity		Arginase-2 Antibody recognizes endogenous levels of total arginase-2 protein. This antibody cross-reacts with arginase-1 protein.				
Source / Purification		Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro338 of human arginase-2 protein. Antibodies are purified by protein A and peptide affinity chromatography.				
Background		Arginase-2 is a mitochondrial enzyme that catalyzes the hydrolysis of L-arginine to L-ornithine and urea (1). Research studies have shown that in acute myeloid leukemia (AML) patients, arginase-2 is released from AML blasts to the plasma, leading to the suppression of T-cell proliferation (2). It was also shown that arginase-2 is required for the immunosuppressive properties of neonatal CD71(+) erythroid cells, which inhibits neonatal host defense against infection (3). In addition, the expression of arginase-2 in dendritic cells is repressed by microRNA-155 during maturation (4). This repression is essential for T-cell activation and response (4).				
Background References		1. Lee, E.J. et al. (2013) <i>Mol Cells</i> 35, 396-401. 2. Mussai, F. et al. (2013) <i>Blood</i> 122, 749-58. 3. Elahi, S. et al. (2013) <i>Nature</i> 504, 158-62. 4. Dunand-Sauthier, I. et al. (2014) <i>J Immunol</i> 193, 1690-700.				
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 Mk: Monkey				
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