

Store at
-20C
#55003**Arginase-2 (D9J1N) XP[®] Rabbit mAb**

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

Applications: W, IP, IHC-P, FC-FP	Reactivity: H M R	Sensitivity: Endogenous	MW (kDa): 40	Source/Isotype: Rabbit IgG	UniProt ID: #P78540	Entrez-Gene Id: 384
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Product Usage Information**Application**

Western Blotting
Immunoprecipitation
Immunohistochemistry (Paraffin)
Flow Cytometry (Fixed/Permeabilized)

Dilution

1:1000
1:100
1:2000
1:800

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.

For a carrier free (BSA and azide free) version of this product see product #77668.

Specificity/Sensitivity

Arginase-2 (D9J1N) Rabbit mAb recognizes endogenous levels of total arginase-2 protein. This antibody does not cross-react with arginase-1 protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues near the carboxy terminus of human arginase-2 protein.

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) *Mol Cells* 35, 396-401.
2. Mussai, F. et al. (2013) *Blood* 122, 749-58.
3. Elahi, S. et al. (2013) *Nature* 504, 158-62.
4. Dunand-Sauthier, I. et al. (2014) *J Immunol* 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 **IHC-P:** Immunohistochemistry (Paraffin) **FC-FP:** Flow Cytometry (Fixed/Permeabilized)

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat

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