**Arginase-2 Antibody**

For Research Use Only. Not For Use In Diagnostic Procedures.

### Applications
- W, IP
- Endogenous

### Species Cross-Reactivity
- H, Mk

### Molecular Wt.
- 40 kDa

### Source
- Rabbit**

#### Background
Arginase-2 is a mitochondrial enzyme catalyzing 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 plasma leading to the suppression of T-cell proliferation (2). It was also shown that arginase-2 is required for the immuno-suppressive 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).

#### 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.

### Storage
- 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.

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

#### Recommended Antibody Dilutions
- Western blotting: 1:1000
- Immunoprecipitation: 1:50

For product specific protocols and a complete listing of recommended companion products please see the product web page at www.cellsignal.com

#### Background References

### Western blot analysis of extracts from human prostate and various cell lines using Arginase-2 Antibody.

![Western blot analysis of extracts from human prostate and various cell lines using Arginase-2 Antibody.](image)

#### Immunoprecipitation of arginase-2 from K-562 cell extracts. Lane 1 is 10% input, lane 2 is Normal Rabbit IgG #2729, and lane 3 is Arginase-2 Antibody. Western blot analysis was performed using Arginase-2 Antibody.

![Immunoprecipitation of arginase-2 from K-562 cell extracts.](image)

### Western blot analysis of extracts from human prostate and human liver using Arginase-2 Antibody (upper) and Arginase-1 (D4E3M™) XP® Rabbit mAb #93668 (lower).

![Western blot analysis of extracts from human prostate and human liver using Arginase-2 Antibody (upper) and Arginase-1](image)

#### Important:
For western blots, incubate membrane with diluted antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween®20 at 4°C with gentle shaking, overnight.

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