

Product Name: KD-Validated Arg2 Recombinant Rabbit Monoclonal Antibody**Catalog #: KVA00190**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC,IHC-P
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:2,000-1:10,000; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:100-1:200
Molecular Weight	Calculated MW: 38.6kDa

Antigen Information

Gene Name	ARG2 ARG2; Arginase 2; Arginase-2, Mitochondrial; Kidney-Type Arginase; Non-Hepatic Arginase;
Alternative Names	Arginase, Type II; Type II Arginase; Arginase II; EC 3.5.3.1; L-Arginine Amidinohydrolase; L-Arginine Ureahydrolase; Nonhepatic Arginase; Kidney Arginase; EC 3.5.3
Gene ID	384.0
SwissProt ID	P78540
Immunogen	A synthesized peptide derived from human Arg2

Background

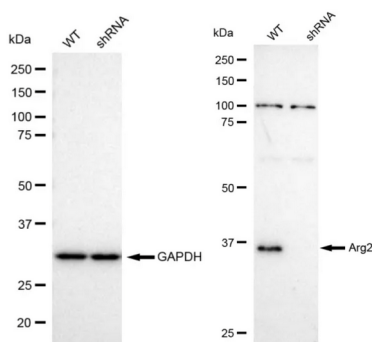
Arginase catalyzes the hydrolysis of arginine to ornithine and urea. At least two isoforms of mammalian arginase exists (types I and II) which differ in their tissue distribution, subcellular localization, immunologic crossreactivity and physiologic function.

The type II isoform encoded by this gene, is located in the mitochondria and expressed in extra-hepatic tissues, especially kidney. The physiologic role of this isoform is poorly understood; it is thought to play a role in nitric oxide and polyamine metabolism. Transcript variants of the type II gene resulting from the use of alternative polyadenylation sites have been described. [provided by RefSeq, Jul 2008]

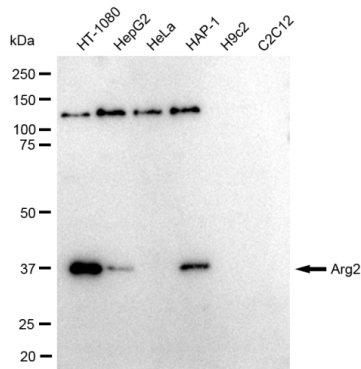
Research Area

Signal Transduction, Metabolism

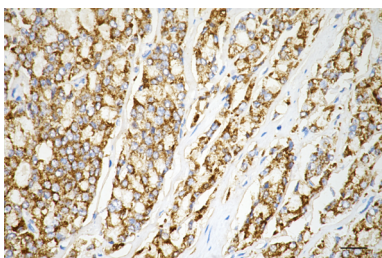
Image Data



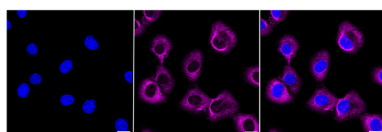
Western blotting analysis using Arg2 antibody (KVA00190). Arg2 expression in wild type (WT) and Arg2 shRNA knockdown (KD) HT-1080 cells with 30 µg of total cell lysates. GAPDH serves as a loading control. The blot was incubated with Arg2 antibody (KVA00190, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



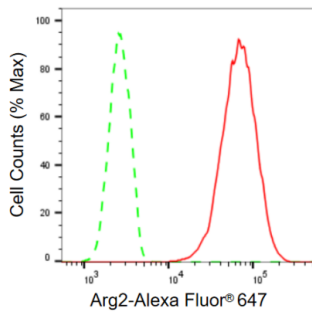
Western blotting analysis using Arg2 antibody (KVA00190). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Arg2 antibody (KVA00190, 1:10,000) and HRP-conjugated goat anti rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunohistochemistry was performed on paraffin-embedded human prostatic adenocarcinoma using arg2 antibody (KVA00190, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



Immunocytochemical staining of HT-1080 cells with Arg2 antibody (KVA00190, 1:1,000). Nuclei were stained blue with DAPI; Arg2 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser intensity and smart gain: Medium. Scale bar: 20 µm.



Flow cytometric analysis of Arg2 expression in HT-1080 cells using Arg2 antibody (KVA00190, 1:2,000). Green, isotype control; red, Arg2.