
Summary

Production Name	Arginase II Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human,Rat,Mouse

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	ARG2
Alternative Names	ARG2; Arginase-2; mitochondrial; Kidney-type arginase; Non-hepatic arginase; Type II arginase
Gene ID	384.0
SwissProt ID	P78540.The antiserum was produced against synthesized peptide derived from human ARG2. AA range:305-354

Application

Dilution Ratio	WB 1:500 - 1:2000. ELISA: 1:5000.
Molecular Weight	38kD

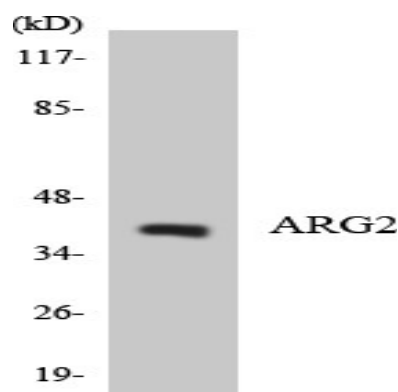
Background

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],catalytic activity:L-arginine + H(2)O = L-ornithine + urea.,cofactor:Binds 2 manganese ions per subunit.,function:May play a role in the regulation of extra-urea cycle arginine metabolism and also in down-regulation of nitric oxide synthesis. Extrahepatic arginase functions to regulate L-arginine bioavailability to NO synthase. Since NO synthase is found in the penile corpus cavernosum smooth muscle, the clitoral corpus cavernosum and the vagina, arginase II plays a role in both male and female sexual arousal. It is therefore a potential target for the treatment of male and female sexual arousal disorders.,online information:Arginase entry,pathway:Nitrogen metabolism; urea cycle; L-ornithine and urea from L-arginine: step 1/1.,similarity:Belongs to the arginase family.,subunit:Homotrimer.,tissue specificity:Expressed most strongly in kidney and prostate, much less strongly in the brain, skeletal muscle, placenta, lung, mammary gland, macrophage, uterus, testis and gut, but apparently not in the liver, heart and pancreas.,

Research Area

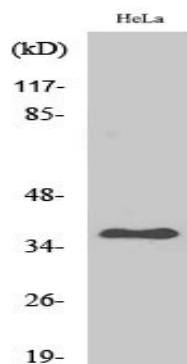
Arginine and proline metabolism;

Image Data



Western blot analysis of the lysates from HeLa cells using ARG2 antibody.

Product Name: Arginase II Rabbit Polyclonal Antibody
Catalog #: APRab07112



Western Blot analysis of various cells using Arginase II Polyclonal Antibody

Note

For research use only.