

Product name:	Arginase II Rabbit Polyclonal Antibody
Cat number:	ABN07112
Conjugate:	Unconjugated
Size:	100μL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human ARG2. AA range:305-354
Reactivity:	Human,Rat,Mouse
Applications:	WB 1:500-1:2000,ELISA 1:5000-1:10000
Molecular Weight:	38kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

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.,