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



Summary

Production Name Arginase II Rabbit Polyclonal Antibody

Description Rabbit Polyclonal Antibody

Host Rabbit
Application WB,ELISA

Reactivity Human,Rat,Mouse

Performance

ConjugationUnconjugatedModificationUnmodified

Isotype IgG

Clonality Polyclonal Form Liquid

Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw Storage

cycles.

Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type **Buffer**

preservative N.

Purification Affinity purification

Immunogen

Gene Name ARG2

ARG2; Arginase-2; mitochondrial; Kidney-type arginase; Non-hepatic arginase; Type II

arginase

Gene ID 384.0

P78540.The antiserum was produced against synthesized peptide derived from human SwissProt ID

ARG2. AA range:305-354

Application

Dilution Ratio WB 1:500-1:2000, ELISA 1:5000.Not yet tested in other applications.

Molecular Weight 38kDa



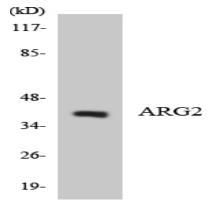
Background

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;

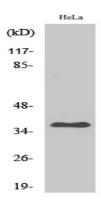
Image Data



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







Western Blot analysis of various cells using Arginase II Polyclonal Antibody

Note

For research use only.