



Arginase II Polyclonal Antibody

Catalog No	YP-Ab-03711
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB;ELISA
Gene Name	ARG2
Immunogen	The antiserum was produced against synthesized peptide derived from human ARG2. AA range:305-354
Specificity	Arginase II Polyclonal Antibody detects endogenous levels of Arginase II protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. ELISA: 1/5000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	ARG2;ARG 2;EC:3.5.3.1;Arginase-2;mitochondrial;arginase;type II;Arginase II; Arginase-2 mitochondrial;Kidney-type arginase;Non-hepatic arginase;Type II arginase
Observed Band	38kD
Calculated Molecular Weight	38kD
Cell Pathway	Mitochondrion .
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. Expressed in activated T cells (PubMed:27745970).
Function	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,

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],

matters needing attention

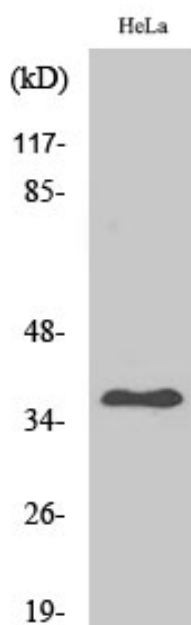
Avoid repeated freezing and thawing!

Usage suggestions

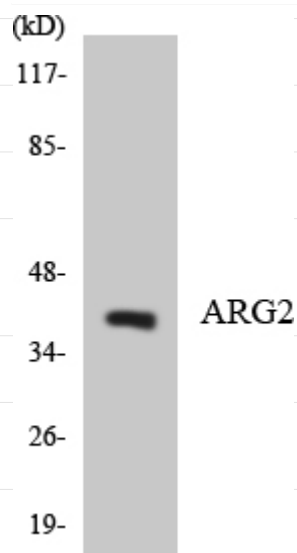
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



Products Images



Western Blot analysis of various cells using Arginase II Polyclonal Antibody



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