



Rabbit Anti-Arginase II antibody

SL11397R

Product Name:	Arginase II
Chinese Name:	精氨酸酶2抗体
Alias:	ARG 2; ARG2; ARG12_HUMAN; Arginase-2; Arginase 2Arginase2; Arginase liver; Arginase type II; Arginase II; ArginaseII; Arginase-II; Arginase1; Arginase-2, mitochondrial; Kidney-type arginase; Non-hepatic arginase; Type II arginase; .
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Cow,Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	36kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Arginase II:181-290/354
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Arginase I (also designated liver-type arginase), which is expressed almost exclusively in the liver, catalyzes the conversion of arginine to ornithine and urea (1). The human arginase I gene, which maps to chromosome 6q23, encodes a 322 amino acid protein. Arginase I exists as a homotrimeric protein and contains a binuclear manganese cluster (2-4). Arginase II catalyzes the same reaction as arginase I, but differs in its tissue

specificity and subcellular location (5,6). Specifically, arginase II localizes to the mitochondria (5,6). Arginase II is expressed in non-hepatic tissues, with the highest levels of expression in the kidneys, but, unlike arginase I, is not expressed in liver (5,6). The human arginase II gene, which maps to chromosome 14q24.1, encodes a 354 amino acid protein (3,5-7). In addition, arginase II contains a putative amino-terminal mitochondrial localization sequence (5,6).

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.

Subunit:

Homotrimer.

Subcellular Location:

Cytoplasm.

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.

Similarity:

Belongs to the arginase family.

SWISS:

P78540

Gene ID:

384

Database links:

[Entrez Gene: 384](#)Human

[Entrez Gene: 11847](#)Mouse

[Entrez Gene: 29215](#)Rat

[Olim: 107830](#)Human

[SwissProt: P78540](#)Human

[SwissProt: O08691](#)Mouse

[SwissProt: O08701](#)Rat

[Unigene: 226007](#)Human

[Unigene: 723133](#)Human

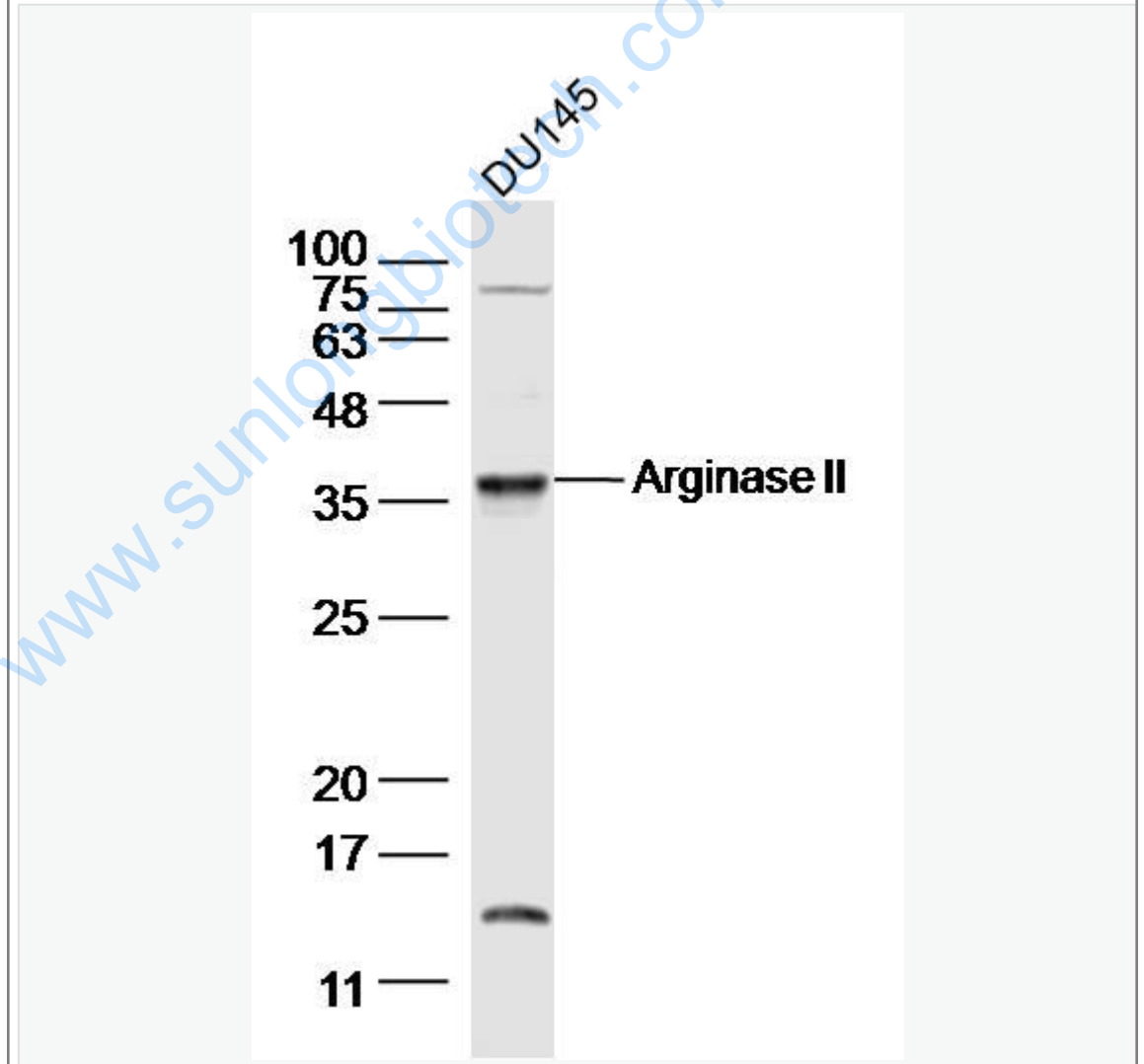
[Unigene: 3506](#)Mouse

[Unigene: 11055](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:



Sample:

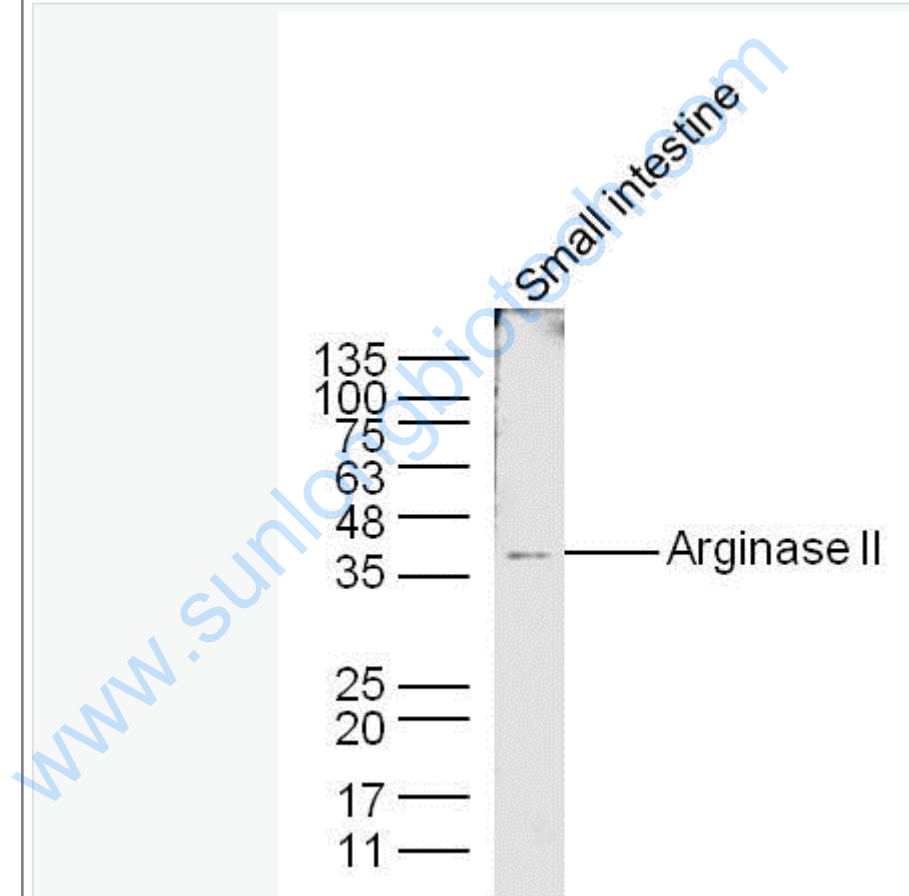
DU145(human)cell Lysate at 30 ug

Primary: Anti-Arginase II (SL11397R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 36kD

Observed band size: 36 kD



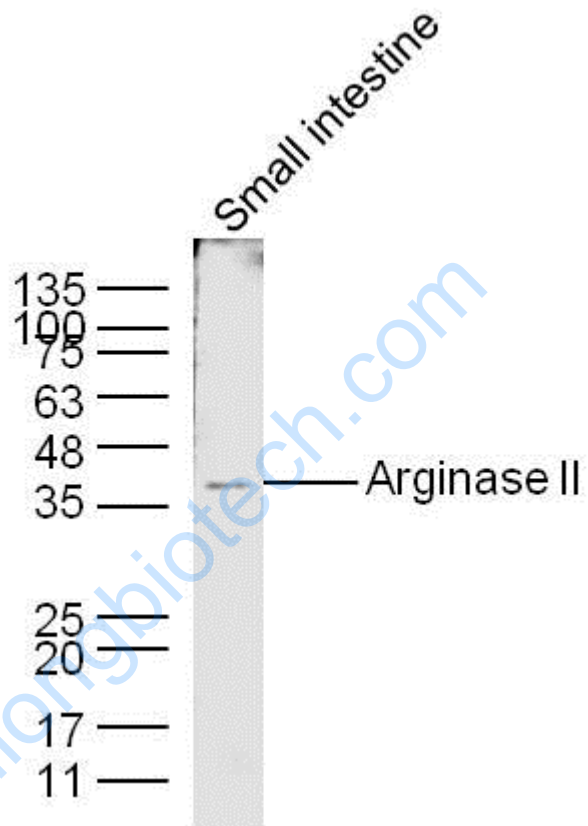
Sample: Small intestine (Mouse) Lysate at 40 ug

Primary: Anti-Arginase II (SL11397R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 36 kD

Observed band size: 36 kD



Sample:

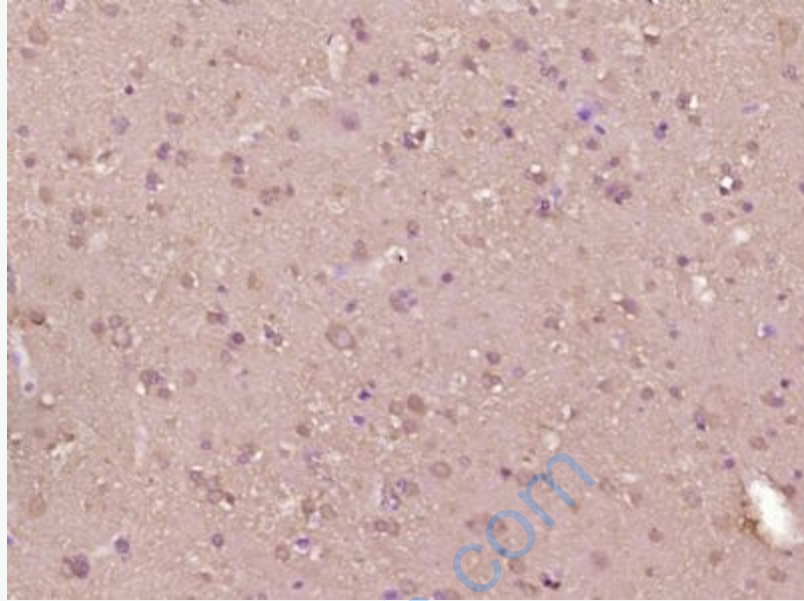
Small intestine (Mouse) Lysate at 40 ug

Primary: Anti-Arginase II (Bs- 11397R) at 1/300 dilution

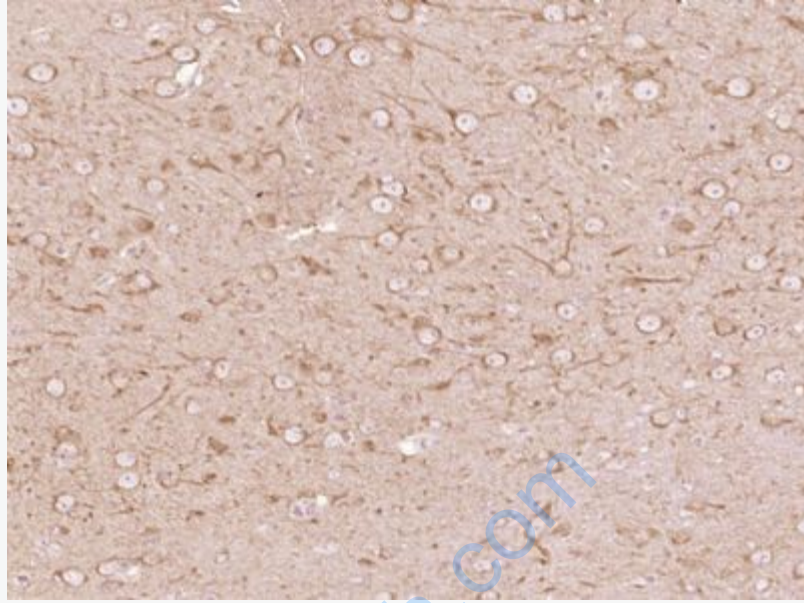
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 36 kD

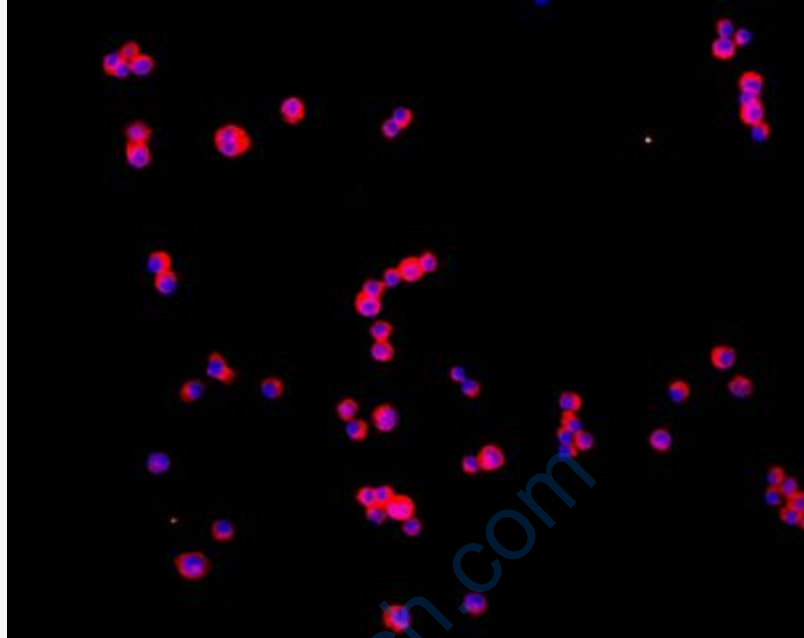
Observed band size: 36 kD



Paraformaldehyde-fixed, paraffin embedded (Human brain glioma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Arginase II) Polyclonal Antibody, Unconjugated (SL11397R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Arginase II) Polyclonal Antibody, Unconjugated (SL11397R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Tissue/cell: human MCF-7 cells;4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min;

Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-Arginase II Polyclonal Antibody, Unconjugated(SL11397R) 1:200, overnight at 4°C; The secondary antibody was Goat Anti-Rabbit IgG, Cy3 conjugated(SL11397R)used at 1:200 dilution for 40 minutes at 37°C.

DAPI(5ug/ml,blue,C-0033) was used to stain the cell nuclei