

bs-11397R**[Primary Antibody]****Arginase II Rabbit pAb****Bioss**
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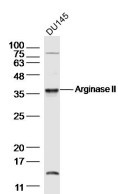
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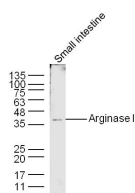
400-901-9800

— DATASHEET —**Host:** Rabbit**Isotype:** IgG**Clonality:** Polyclonal**GeneID:** 384**SWISS:** P78540**Target:** Arginase II**Immunogen:** KLH conjugated synthetic peptide derived from human Arginase II: 181-290/354.**Purification:** affinity purified by Protein A**Concentration:** 1mg/ml**Storage:** 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

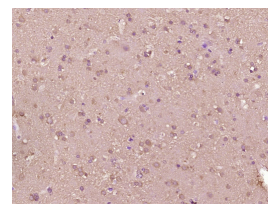
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: 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).**Applications:** **WB** (1:500-2000)**IHC-P** (1:100-500)**IHC-F** (1:100-500)**IF** (1:100-500)**Flow-Cyt** (1ug/Test)**ICC/IF** (1:100)**Reactivity:** Human, Mouse
(predicted: Rat, Rabbit,
Cow, Chicken, Dog)**Predicted
MW.:** 36 kDa**Subcellular
Location:** Cytoplasm**— VALIDATION IMAGES —**

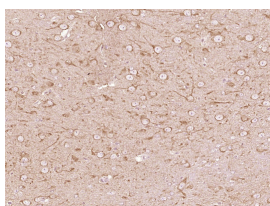
Sample: DU145(human)cell Lysate at 30 ug
 Primary: Anti-Arginase II (bs-11397R) at 1/300
 dilution Secondary: IRDye800CW Goat Anti-
 Rabbit IgG at 1/20000 dilution Predicted band
 size: 36kD Observed band size: 36 kD



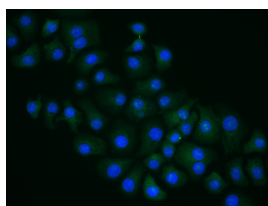
Sample: Small intestine (Mouse) Lysate at 40 ug
 Primary: Anti-Arginase II (bs-11397R) at 1/300
 dilution Secondary: IRDye800CW Goat Anti-
 Rabbit IgG at 1/20000 dilution Predicted band
 size: 36 kD Observed band size: 36 kD



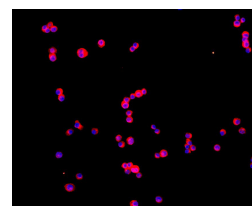
Paraformaldehyde-fixed, paraffin embedded
 (Human brain glioma); Antigen retrieval by
 boiling in sodium citrate buffer (pH6.0) for
 15min; Block endogenous peroxidase by 3%
 hydrogen peroxide for 20 minutes; Blocking
 buffer (normal goat serum) at 37°C for 30min;
 Antibody incubation with (Arginase II) Polyclonal
 Antibody, Unconjugated (bs-11397R) 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



HepG2 cell; 4% Paraformaldehyde-fixed; Triton



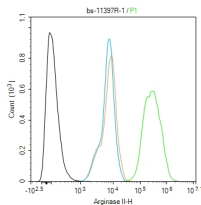
Tissue/cell: human MCF-7 cells;4%

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

(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 (bs-11397R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (Arginase II) polyclonal Antibody, Unconjugated (bs-11397R) 1:100, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei.

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 (bs-11397R) 1:200, overnight at 4°C; The secondary antibody was Goat Anti-Rabbit IgG, Cy3 conjugated (bs-0295G-Cy3) used at 1:200 dilution for 40 minutes at 37°C. DAPI (5ug/ml, blue, C-0033) was used to stain the cell nuclei



Blank control (black line) :HepG2. Primary Antibody (green line): Rabbit Anti-Arginase II antibody (bs-11397R) Dilution:1ug/Test; Secondary Antibody (white blue line) : Goat anti-rabbit IgG-AF488 Dilution: 0.5ug/Test. Isotype control (orange line) : Normal Rabbit IgG Protocol The cells were fixed with 4% PFA (10min at room temperature) and then permeabilized with 90% ice-cold methanol for 20 min at -20°C, The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

— SELECTED CITATIONS —

- **[IF=12.12]** Zaytouni et al. Critical role for arginase 2 in obesity-associated pancreatic cancer. (2017) Nat.Comm. 8:242 WB,IHC ;Human. 28808255
- **[IF=11.4]** Ling-yun Zhou. et al. Arginase2 mediates contrast-induced acute kidney injury via facilitating nitrosative stress in tubular cells. REDOX BIOL. 2023 Nov;67:102929 IF,IHC ;Mouse,Human. 37856999
- **[IF=5.9]** Aihara Seishi. et al. Spermidine from arginine metabolism activates Nrf2 and inhibits kidney fibrosis. COMMUN BIOL. 2023 Jun;6(1):1-14 ICC,WB ;Mouse,Human. 37380734
- **[IF=6.3]** Imazu Noriyuki. et al. Arginase 2 attenuates ulcerative colitis by antioxidant effects of spermidine. J GASTROENTEROL. 2024 May;:1-17 IHC ;Mouse,Human. 38695904
- **[IF=1.632]** Liu Y et al. Isolation and characterization of ovine monocyte-derived macrophages from peripheral blood.(2018)Vet Immunol Immunopathol. Nov;205:83-92. IF ;Sheep. 30459005