### For Research Use Only

# Arginase-2 Polyclonal antibody

Catalog Number: 14825-1-AP

Featured Product

10 Publications

BC001350

GeneID (NCBI):

**UNIPROT ID:** 

P78540 Full Name:

GenBank Accession Number:



**Basic Information** 

Catalog Number: 14825-1-AP Concentration:

700 ug/ml Source: Rabbit Isotype:

Immunogen Catalog Number:

AG6609

39 kDa

Observed MW: 39-42 kDa

arginase, type II Calculated MW:

**Purification Method:** 

Antigen affinity purification

Recommended Dilutions:

WB 1:1000-1:4000 IHC 1:50-1:500

**Applications** 

**Tested Applications:** WB, IHC, ELISA Cited Applications: WB, IHC, IF

Species Specificity: human, mouse, rat **Cited Species:** human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

**Positive Controls:** 

WB: Caco-2 cells, mouse kidney tissue, rat kidney

IHC: human prostate cancer tissue, human kidney tissue

# **Background Information**

Arginase 2 is composed of 354 amino acid residues, including an NH2-terminal presequence for mitochondrial targeting and import. In the mitochondria, ornithine generated by Arginase 2 will give rise to glutamate via ornithine aminotransferase (OAT). Glutamate participates in several transamination reactions, including forming  ${\tt a}$  -ketoglutarate (  ${\tt a}$  KG) that may enter the TCA cycle and increase cycle intermediates and flux. Arginase 1 is mainly expressed in hepatocytes, and mice with a disruption of Arginase 1 gene die soon after birth. Arginase 2 is poorly expressed in hepatocytes, and most highly expressed in kidney, prostate, and immune cells such as monocyte/ macrophages. (PMID: 25234945,PMID: 27214549)

#### **Notable Publications**

Author	Pubmed ID	Journal	Application
Hagai Tavori	25183802	J Lipid Res	WB
Lu Gao	30889486	Biomed Pharmacother	WB
Katherine M Halloran	35098299	Biol Reprod	IHC

Storage

Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

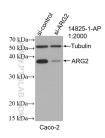
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

T: 4006900926 E: Proteintech-CN@ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

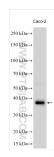
## **Selected Validation Data**



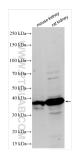
WB result of ARG2 antibody (14825-1-AP; 1:2000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Arginase-2 transfected Caco-2 cells.



Immunohistochemical analysis of paraffinembedded human prostate cancer tissue slide using 14825-1-AP (ARG2 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Caco-2 cells were subjected to SDS PAGE followed by western blot with 14825-1-AP (Arginase-2 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Various lysates were subjected to SDS PAGE followed by western blot with 14825-1-AP (Arginase-2 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.