

For Research Use Only

Arginase-1 Monoclonal antibody, PBS Only

Catalog Number: 66129-1-PBS

Featured Product



Basic Information

Catalog Number:

66129-1-PBS

Size:

100ug, Concentration: 1mg/ml by Nanodrop;

Source:

Mouse

Isotype:

IgG1

Immunogen Catalog Number:

AG8810

GenBank Accession Number:

BC005321

GeneID (NCBI):

383

UNIPROT ID:

P05089

Full Name:

arginase, liver

Calculated MW:

236aa, 25 kDa; 322aa, 35 kDa

Observed MW:

36 kDa

Purification Method:

Protein G purification

CloneNo.:

5D6D12

Applications

Tested Applications:

WB, IHC, IF/ICC, IF-P, IP, Indirect ELISA

Species Specificity:

human, mouse, rat, pig, rabbit

Background Information

Arginase-1 (Liver arginase) belongs to the arginase family. ARG1 is a novel immunohistochemical marker of hepatocellular differentiation in fine needle aspiration cytology and a marker of hepatocytes and hepatocellular neoplasms. ARG1 is closely associated with alternative macrophage activation and ARG1 has been shown to protect motor neurons from trophic factor deprivation and allow sensory neurons to overcome neurite outgrowth inhibition by myelin proteins (PMID: 20071539, PMID: 12098359). It can exist as a homotrimer and it has 3 isoforms produced by alternative splicing (PMID: 16141327). Defects in ARG1 are the cause of argininemia (ARGIN). Deletion or TNF-mediated restriction of ARG1 unleashes the production of NO by NOS2, which is critical for pathogen control (PMID: 27117406). Before stroke, ARG1 mainly expressed in neurons in a normal brain (PMID: 23311438). The expression of ARG1 increases in microglia/macrophages and astrocytes early after CNS injuries. ARG1 has been regarded as a marker for beneficial microglia/macrophages and possesses antiinflammatory and tissue repair properties under various pathological conditions (PMID: 26538310, PMID: 31619589).

Storage

Storage:

Store at -80°C.

Storage Buffer:

PBS Only

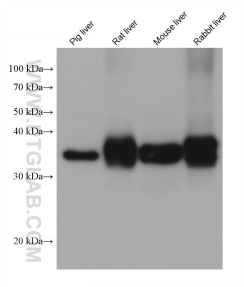
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

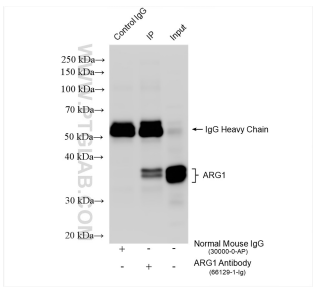
E: proteintech@ptglab.com
W: ptglab.com

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

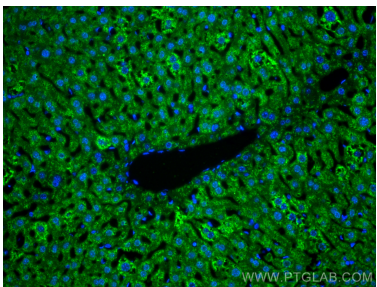
Selected Validation Data



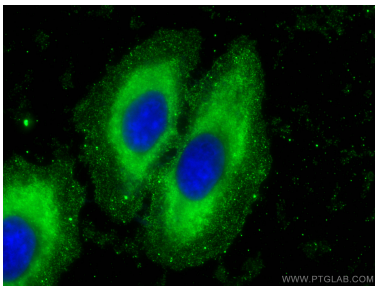
Various lysates were subjected to SDS PAGE followed by western blot with 66129-1-Ig (Arginase-1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66129-1-PBS in a different storage buffer formulation.



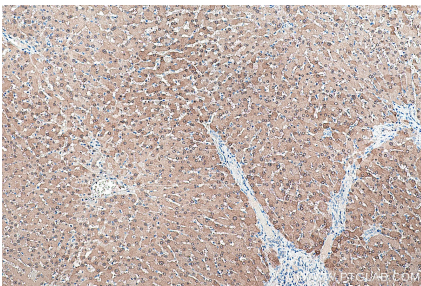
IP result of anti-Arginase-1 (IP:66129-1-Ig, 4ug; Detection:66129-1-Ig 1:10000) with mouse liver tissue lysate 2240 ug. This data was developed using the same antibody clone with 66129-1-PBS in a different storage buffer formulation.



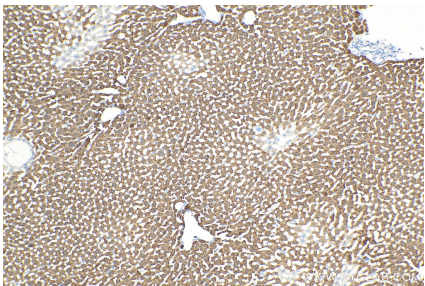
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse liver tissue using Arginase-1 antibody (66129-1-Ig, Clone: 5D6D12) at dilution of 1:400 and Multi-rAb CoraLite ® Plus 488-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (RGAM002). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66129-1-PBS in a different storage buffer formulation.



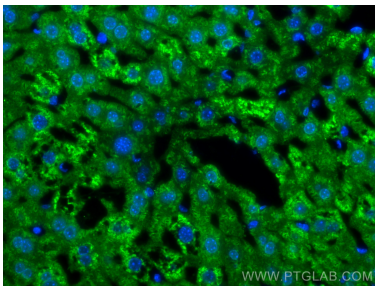
Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using Arginase-1 antibody (66129-1-Ig, Clone: 5D6D12) at dilution of 1:800 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 66129-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 66129-1-Ig (Arginase-1 antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66129-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded mouse liver tissue slide using 66129-1-Ig (Arginase-1 antibody) at dilution of 1:4800 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66129-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse liver tissue using Arginase-1 antibody (66129-1-Ig, Clone: 5D6D12) at dilution of 1:400 and Multi-rAb CoraLite ® Plus 488-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (RGAM002). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66129-1-PBS in a different storage buffer formulation.