

For Research Use Only

# CoraLite® Plus 647-conjugated Arginase-1 Recombinant antibody

Catalog Number:CL647-82975



## Basic Information

<b>Catalog Number:</b> CL647-82975	<b>GenBank Accession Number:</b> BC005321	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 383	<b>CloneNo.:</b> 4M7
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P05089	<b>Recommended Dilutions:</b> IF-P 1:50-1:500
<b>Isotype:</b> IgG	<b>Full Name:</b> arginase, liver	<b>Excitation/Emission maxima wavelengths:</b> 654 nm / 674 nm
<b>Immunogen Catalog Number:</b> AG8595	<b>Calculated MW:</b> 236aa,25 kDa; 322aa,35 kDa	
	<b>Observed MW:</b> 35-36 kDa	

## Applications

<b>Tested Applications:</b> IF-P	<b>Positive Controls:</b> IF-P : mouse liver tissue,
<b>Species Specificity:</b> human, mouse, rat	

## 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). ARG1 mainly expresses in neurons in a normal brain. 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).

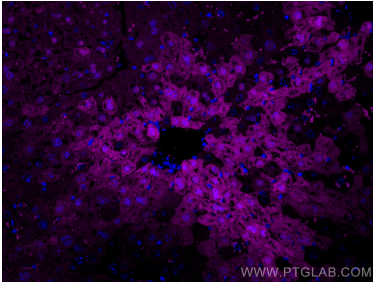
## Storage

**Storage:**  
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.  
**Aliquoting is unnecessary for -20°C storage**

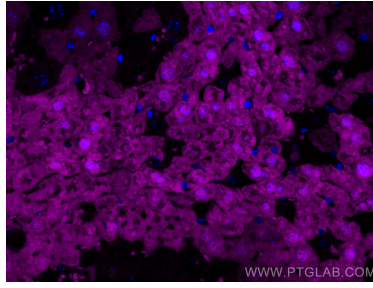
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

## Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse liver tissue using CoraLite® Plus 647 Arginase-1 antibody (CL647-82975, Clone: 4M7) at dilution of 1:200. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse liver tissue using CoraLite® Plus 647 Arginase-1 antibody (CL647-82975, Clone: 4M7) at dilution of 1:200. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).