For Research Use Only

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



Catalog Number: CL647-16001

**Basic Information** 

Catalog Number:

CL647-16001

1000 µg/ml Source:

Rabbit Isotype:

Immunogen Catalog Number:

AG8595

GenBank Accession Number:

BC005321

GeneID (NCBI):

**UNIPROT ID:** 

P05089 Full Name:

arginase, liver Calculated MW:

236aa,25 kDa; 322aa,35 kDa

Observed MW: 35-36 kDa

**Purification Method:** 

Antigen affinity purification

Excitation/Emission maxima

wavelengths: 654 nm / 674 nm

**Applications** 

**Tested Applications:** 

FC (Intra)

Species Specificity:

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 protectmotor neurons from trophic factor deprivation and allow sensory neurons to overcome neurite outgrowth inhibition by myelin proteins (PMID: 20071539, PMID:12098359). It can exsit 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).

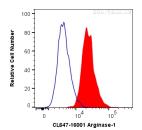
Storage

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

## Selected Validation Data



1X10^6 HepG2 cells were intracellularly stained with 0.2 ug CoraLite® Plus 647 Anti-Human Arginase-1 (CL647-16001) (red), or 0.2 ug isotype control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).