

# IHCeasy<sup>®</sup> ARG1 Ready-To-Use IHC Kit

Catalog Number: **KHC0383**

## General Information

Sample type:  
FFPE tissue  
Cited sample type:  
Reactivity:  
Human, Rat  
Cited Reactivity:

Assay type:  
Immunohistochemistry  
Primary antibody type:  
Mouse Monoclonal  
Secondary antibody type:  
Polymer-HRP-Goat anti-Mouse

## Kit Component

Component	Size	Concentration
Antigen Retrieval Buffer	100 mL	50×
Washing Buffer	100 mL ×2	20×
Blocking Buffer	5 mL	RTU
Primary Antibody	5 mL	RTU
Secondary Antibody	5 mL	RTU
Chromogen Component A	0.2 mL	RTU
Chromogen Component B	4 mL	RTU
Signal Enhancer	5 mL	RTU
Counter Staining Reagent	5 mL	RTU
Mounting Media	5 mL	RTU
Control Slide	1 slide (Optional)	FFPE
Datasheet	1 Copy	
Manual	1 Copy	

## Storage Instructions

All the reagents are stored at 2-8°C. The kit is stable for 6 months from the date of receipt.

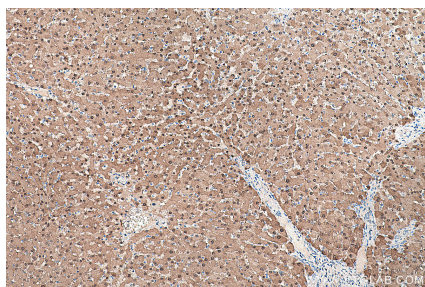
## Background

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. It can exist as a homotrimer and it has 3 isoforms produced by alternative splicing. 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. 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.

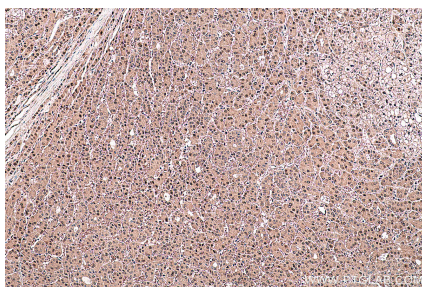
## Synonyms

ARG1, Arginase 1, arginase, liver, Arginase-1, liver Arginase, Liver type arginase, Type I arginase

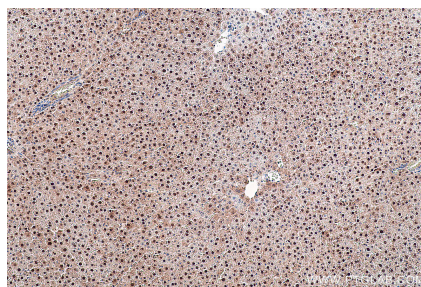
## Selected Validation Data



Immunohistochemical analysis of paraffin-embedded human liver tissue slide using KHC0383 (ARG1 IHC Kit).



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using KHC0383 (ARG1 IHC Kit).



Immunohistochemical analysis of paraffin-embedded rat liver tissue slide using KHC0383 (ARG1 IHC Kit).