

#### ARG1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8976b

#### Specification

# ARG1 Antibody (C-term) - Product Information

Application Primary Accession	<b>WB, IHC-P, FC,E</b> P05089
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	293-322

#### ARG1 Antibody (C-term) - Additional Information

Gene ID 383

**Other Names** Arginase-1, Liver-type arginase, Type I arginase, ARG1

Target/Specificity

This ARG1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 293-322 amino acids from the C-terminal region of human ARG1.

**Dilution** WB~~1:1000 IHC-P~~1:50~100 FC~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** ARG1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## ARG1 Antibody (C-term) - Protein Information

Name ARG1

**Function** Key element of the urea cycle converting L-arginine to urea and L-ornithine, which is further metabolized into metabolites proline and polyamides that drive collagen synthesis and



bioenergetic pathways critical for cell proliferation, respectively; the urea cycle takes place primarily in the liver and, to a lesser extent, in the kidneys.

**Cellular Location** 

Cytoplasm. Cytoplasmic granule. Note=Localized in azurophil granules of neutrophils (PubMed:15546957)

Tissue Location

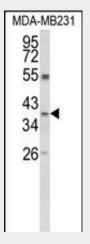
Within the immune system initially reported to be selectively expressed in granulocytes (polymorphonuclear leukocytes [PMNs]) (PubMed:15546957). Also detected in macrophages mycobacterial granulomas (PubMed:23749634). Expressed in group2 innate lymphoid cells (ILC2s) during lung disease (PubMed:27043409)

## ARG1 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

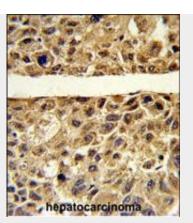
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

```
ARG1 Antibody (C-term) - Images
```

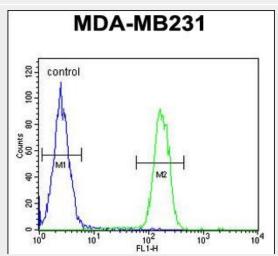


Western blot analysis of ARG1 Antibody (C-term) (Cat. #AP8976b) in MDA-MB231 cell line lysates (35ug/lane). ARG1 (arrow) was detected using the purified Pab.





Formalin-fixed and paraffin-embedded human hepatocarcinoma reacted with ARG1 Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



ARG1 Antibody (C-term) (Cat. #AP8976b) flow cytometric analysis of MDA-MB231 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

## ARG1 Antibody (C-term) - Background

Arginase catalyzes the hydrolysis of arginine to ornithine and urea. At least two isoforms of mammalian arginase exist (types I and II) which differ in their tissue distribution, subcellular localization, immunologic crossreactivity and physiologic function. The type I isoform encoded by this gene, is a cytosolic enzyme and expressed predominantly in the liver as a component of the urea cycle. Inherited deficiency of this enzyme results in argininemia, an autosomal recessive disorder characterized by hyperammonemia.

## ARG1 Antibody (C-term) - References

Haraguchi,Y., et.al., J. Clin. Invest. 86 (1), 347-350 (1990) **ARG1 Antibody (C-term) - Citations** • <u>ARG1 functions as a tumor suppressor in breast cancer</u>