abcam

ab212522

Anti-Liver Arginase antibody [ARG1/1125] - BSA and Azide free

Key facts

Isotype	IgG3
Host species	Mouse
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Fragment Protein within Human ARG1 aa 1-150. The exact immunogen used to generate this antibody is proprietary information. Database link P05089
Carrier free	Yes
Clone number	ARG1/1125
Purification technique	Affinity purification Protein A
Light chain type	kappa
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Purified from bioreactor concentrate.

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	2-4 µg/mL
Notes	Perform heat-mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Not recommended

Species	Recombinant fragment - Human, Recombinant full length protein - Human
Dilution info	-
Notes	-

Flow Cyt

Expected

Species	Human
Dilution info	-
Notes	Final volume 100 uL.

Not recommended

Species	Recombinant fragment - Human, Recombinant full length protein - Human
Dilution info	-
Notes	-

WB

Tested

Species	Recombinant fragment - Human
Dilution info	0.5-1 µg/mL
Notes	-

Species	Human
Dilution info	0.5-1 µg/mL
Notes	-

Not recommended

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

Protein Array

Tested

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Recombinant fragment - Human
Dilution info	-
Notes	-

ICC/IF

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Recombinant fragment - Human, Recombinant full length protein - Human
Dilution info	-
Notes	-

Target data

See full target information 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. Functions in L-arginine homeostasis in nonhepatic tissues characterized by the competition between nitric oxide synthase (NOS) and arginase for the available intracellular substrate arginine. Arginine metabolism is a critical regulator of innate and adaptive immune responses. Involved in an antimicrobial effector pathway in polymorphonuclear granulocytes (PMN). Upon PMN cell death is liberated from the phagolysosome and depletes arginine in the microenvironment leading to suppressed T cell and natural killer (NK) cell proliferation and cytokine secretion (PubMed:15546957, PubMed:16709924, PubMed:19380772). In group 2 innate lymphoid cells (ILC2s) promotes acute type 2 inflammation in the lung and is involved in optimal ILC2 proliferation but not survival (By similarity). In humans, the immunological role in the monocytic/macrophage/dendritic cell (DC) lineage is unsure.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

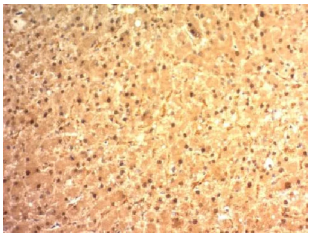
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

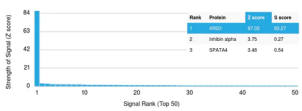
3 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Liver Arginase antibody [ARG1/1125] - BSA and Azide free (ab212522)

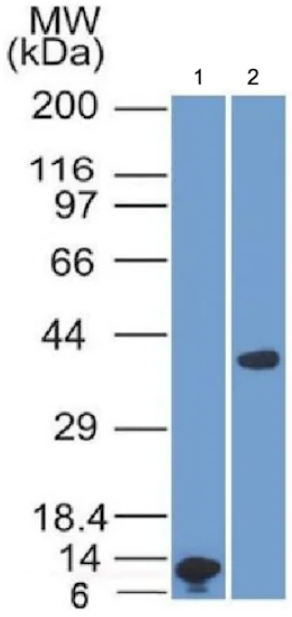
Liver Arginase Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-Liver Arginase antibody

Immunohistochemical analysis of paraffin embedded Human hepatocellular carcinoma tissue labeling Arginase with ab212522 at 2 µg/mL.



Protein Array - Anti-Liver Arginase antibody [ARG1/1125] - BSA and Azide free (ab212522)

This data was produced with ab215843, the same antibody in a different formulation with BSA and Azide.
ab215843 was tested in protein array against over 19000 different full-length human proteins.
Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProtTM array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProtTM are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target.
A MAb is specific to its intended target if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.



Western blot - Anti-Liver Arginase antibody [ARG1/1125] - BSA and Azide free (ab212522)

All lanes:
Western blot - Anti-Liver Arginase antibody [ARG1/1125] - BSA and Azide free (ab212522) at 0.5 µg/mL

Lane 1:
Recombinant Arginase protein fragment

Lane 2:
Human liver tissue lysate

Predicted band size: 17 kDa, 35 kDa

Observed band size: 35-38 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.