

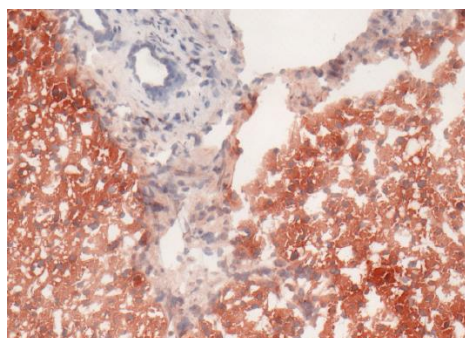
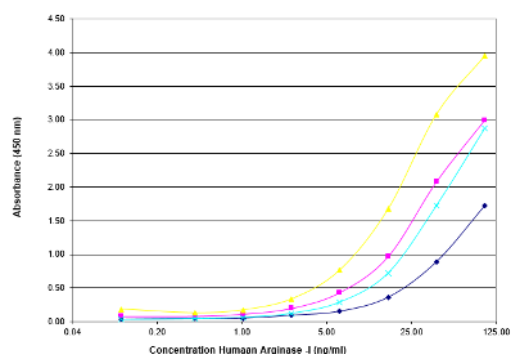
**CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET**

<b>Product name</b>	Arginase-1, Human, clone 9C5		
<b>Catalog number</b>	HM2163-500UG		
<b>Lot number</b>	xxxxxXxxxx-X	<b>Expiry date</b>	MMM YYYY
<b>Volume</b>	xx ml	<b>Amount</b>	500 µg
<b>Formulation</b>	0.2 µm filtered in PBS	<b>Concentration</b>	xx mg/ml
<b>Host Species</b>	Mouse IgG1	<b>Conjugate</b>	None
<b>Endotoxin</b>	N.A.	<b>Purification</b>	Protein G
<b>Storage</b>	4°C		

**Application notes**

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #						1		
Yes	•					•	•	
No								•
N.D.		•	•	•	•			

N.D.= Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot



IA: immuno assay experiment with HM2162 as capture antibody and HM2163 as detection antibody. IHC-F: frozen sections on human liver tissue.

Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.

- IA: the antibody can be used as detection antibody.

**General Information**

**Description** Monoclonal antibody 9C5 reacts specifically with Arginase I, the final enzyme in the urea cycle, which is responsible for the hydrolysis of arginine to urea and ornithine. The highest concentration of the enzyme is present in the liver in which the bulk of ureagenesis occurs. Two types of arginases are known: Arginase I and II. The cytosolic enzyme found primarily in liver is Arginase I, a 35 kD protein that circulates as trimer. Arginase II is exclusively located in the mitochondrion. Arginase I is next to the liver in man also expressed by mature fetal and adult red blood cells and activated monocytic cells. During inflammation induction of Arginase I by inflammatory cytokines in monocytic cells is considered to lead to a local depletion of arginine resulting in a microenvironment that prevents nitric oxide production and arginine dependent T cell function. Arginase II is expressed by kidney, nucleated red blood cells, brain, spinal cord, gastro-intestinal tract, mammary gland and prostate. Enhanced circulating Arginase I levels have been reported after surgery, following haemorrhage and in asthmatic patients. Measurement of circulating Arginase I has been used experimentally as rapid marker for liver injury.

**Immunogen** Recombinant human type-1 arginase.

**References** 1. Ikemoto, M et al; A useful ELISA system for human liver-type arginase, and its utility in diagnosis of liver diseases. Clin Biochem 2001, 34: 455

**Storage&stability** Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.

**Precautions** For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result from the use or derivation of this product.

---

We hereby certify that the above-stated information is correct and that this product has been successfully tested by the Quality Control Department. This product was released for sale according to the existing specifications. This document has been produced electronically and is valid without a signature.

Approved by Manager of QC  
Brenda Teunissen

Date  
13/01/2020

Do you have any questions or comments regarding this product? Please contact us via [support@hycultbiotech.com](mailto:support@hycultbiotech.com).