CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	Arginase 1, Human, clone D1.2		
Catalog number	HM2324		
Lot number	-	**Expiry date**	-
Volume	1 ml	**Amount**	100 µg
Formulation	0.2 µm filtered in PBS+0.1%BSA+0.02%NaN3	**Concentration**	100 µg/ml
Host Species	Mouse IgG1	**Conjugate**	None
Endotoxin	N.A.	**Purification**	Protein G
Storage	4°C		

Application notes

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #								
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

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.

- W: A reduced sample treatment and SDS-Page was used. The band size is 40 kDa
- IA: clone D1.2 can be used as a coat antibody in immune assay setting
- FC: 2 µg of antibody D1.2 stains intracellular Arginase 1. For intracellular staining 250,000 cells were permeabilized with buffer containing 0.1% Saponin. The HepG2 cells were fixed in 4% paraformaldehyde before staining.

General Information

Description

Monoclonal antibody D1.2 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

Peptide D14967-1-1t/m6

Cross reactivity

Sheep: Yes; Mouse: Yes (weak).

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
Robbert Zwinkels

Date
16/03/2018

Do you have any questions or comments regarding this product? Please contact us via support@hycultbiotech.com.