

CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	MGO-modified proteins, Human, clone MGO-1		
Catalog number	HM5014-20UG		
Lot number	-	Expiry date	-
Volume	200 µl	Amount	20 µg
Formulation	0.2 µm filtered in PBS+0.1%BSA+0.02%NaN ₃	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 #		1				1		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

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.

- IHC-P: Sections were preincubated in 0.01 mol/l citrate, pH 6, 37°C for 10 min. Tissue sections were fixed in 4% formalin and subsequently embedded in paraffin. As positive control atherosclerotic plaques was used (Ref.1).

General Information

Description	The monoclonal antibody MGO-1 recognizes human MGO modified proteins. The reactivity of the monoclonal MGO-1 antibody has an at least 1,000-fold preference for THP over argpyrimidine or MG-H1. Methylglyoxal (MGO) is an endogenous product of glucose metabolism. Increased production and accumulation of methylglyoxal (MGO), as well as increased modification of proteins by glycooxidation, are hallmarks of aging and diabetes. MGO was shown to modify proteins and to contribute to the accumulation of damaged proteins that can be toxic to cells. A number of studies have shown that MGO levels are significantly elevated in patients with Type 2 Diabetes and correlates well with fasting plasma glucose and hemoglobin A1c (HbA1c) levels. Moreover, increased formation of the MGO is implicated in renal dysfunction and is known to be involved in the development of DN (diabetic nephropathy).
Immunogen	MGO-modified KLH
Cross reactivity	Multispecies: Yes; Glyoxal-modified albumin: No; 3-Deoxyglucosone-modified albumin: No; CML (Carboxy Methyl Lysine): No; Pentosidine: No
References	1. Eupen, van M. The methylglyoxal-derived AGE tetrahydropyrimidine is increased in plasma of individuals with type 1 diabetes mellitus and in atherosclerotic lesions and is associated with sVCAM-1. <i>Diabetologia</i> 2013; 56, 1845
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
13/01/2021

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