CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	Glyoxalase-1, Human, clone 17E6A12/G4		
Catalog number	HM2370		
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 or non-reduced sample treatment and SDS-Page can be used. The band size is ~25 kDa.

General Information

Description Monoclonal antibody 17E6A12/G4 recognizes human glyoxalase-I (GLO1). GLO1 is a major protein form the glyoxalase systems which is present in the cytosol of all cells. The function of this system is the metabolism of reactive dicarbonyl metabolites to less reactive products. GLO1 catalysis the isomerization of hemithioacetal derived from methylglyoxal and glutathione. GLO1 prevents the harmful accumulation of methylglyoxal. The GLO1 gene exist of 3 phenotypes. Embodying the homozygous and heterozygous expression of the protein. GLO1 consists of alpha helical regions and multiple beta strands. Protein and DNA modification by substrates of the glyoxalase system is linked to healthy aging, including diseases like diabetes and vascular dysfunction. This vascular impairment could lead to complications like retinopathy, nephropathy and bad wound healing. Overexpression of GLO1 in endothelial cells under hyperglycemic condition can revert the negative effects on angiogenesis. Glo1 is also considered to be a tumor suppressor protein and it is ubiquitously expressed in most tumor cells. Therefor inducers of GLO1 expression could be useful in cancer treatment.

Immunogen Recombinant Glyoxalase I

Aliases Lactoylglutathione lyase; Aldoketomutase; Glx I; Ketone-aldehyde mutase; Methylglyoxalase; S-D-lactoylglutathione methylglyoxal lyase

Gene Gene name: GLOI Entrez Gene ID: 2739 Uniprot: Q04760

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
08/01/2019

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