GLUTAMATE DEHYDROGENASE (GLDH)

HITACHI 917
HITACHI MODULAR P

FOR FULL PRODUCT DETAILS, PLEASE REFER TO THE KIT INSERT.

INTENDED USE

For the quantitative *in vitro* determination of Glutamate Dehydrogenase (GLDH) in Serum. This product is suitable for use on the Hitachi 917 and Hitachi P Module analysers.

Cat. No.			
GL 441	R1a.	Buffer/Substrate	1 x 70 ml
8 x 33 t	R1b.	Reagent	8 x 6 ml
	R2.	α-oxoglutarate	2 x 10 ml
GL442	R1a.	Buffer/Substrate	5 x 100 ml
5 x 555 t	R1b.	Enzyme/Coenzyme	5 x 100 ml
	R2.	α-oxoglutarate	2 x 20 ml

This is an optimised standard method according to the recommendations of the Deutsche Gesellschaft fur Klinische Chemie.

SAMPLE

Serum.
Haemolytic and lipaemic sera interfere with the assay.

STABILITY AND PREPARATION OF REAGENTS

R1a. Buffer/Substrate
Contents stable as supplied up to the expiry date when stored at +2 to +8°C or 7 days at +15 to +25°C.

R1b. Enzyme/Coenzymes
Cat. No. GL 441
Reconstitute the contents of one vial of Enzyme/Coenzyme R1b with **6 ml** of Buffer/Substrate R1a. Stable for 1 week at +2 to +8°C.

Cat. No. GL 442
Reconstitute the contents of one vial of Enzyme/Coenzyme R1b with a portion of Buffer/ Substrate R1a and then transfer the entire contents to bottle R1a rinsing vial R1b several times. Stable for 1 week at +2 to +8°C.

R2. α-oxoglutarate
Reconstitute the contents of one vial of α-oxoglutarate (R2) with the appropriate volume of redistilled water:
50 ml for the **8 x 6 ml** kit (GL 441)
100 ml for the **5 x 100 ml** kit (GL 442)
Stable for 8 weeks at +2 to +8°C or 7 days at +15 to +25°C.

R1 = Buffer/Substrate/Enzyme/Coenzyme
R3 = α-oxoglutarate

MATERIALS PROVIDED

Buffer/Substrate
Enzyme/Coenzyme
α-oxoglutarate

MATERIALS REQUIRED BUT NOT PROVIDED

Randox Assayed Multi-sera Level 2 (Cat. No. HN 1530) and Level 3 (Cat. No. HE 1532)
Randox Calibration Serum Level 3 (Cat. No. CAL 2351)

INSTRUMENT SETTINGS FOR HITACHI 917

ANALYZE

CH-Test-Type	* - GLDH - Ser
Assay	Rate A - 10
Point	21 - 34 - 0 - 0
Wave (Sub-Main)	415 - 340
S. VOL (NORMAL)	15 - 0 - 0
(DEC)	2 - 0 - 0
(INC)	30 - 0 - 0
Diluent	Detergent 1
Reagent Vol. R1	180 - 0 - * - 7
Reagent Vol. R2	0 - 0 - * - 0
Reagent Vol. R3	36 - 0 - * - 7
Reagent Vol. R4	0 - 0 - * - 0
ABS Limit	8000 - Decrease
Prozone Limit	0 - Lower
Cell Det.	Detergent 1

CALIBRATOR

Calib. Type	Linear
Point	2 - 2
Weight	0
Auto Calibration	
Blank	24
Span	0
2 Point	0
Full	0
SD Limit	0.1
Duplicate Limit	5 % - 10 Abs
Sensitivity Lim.	-99999 - 99999
S1 ABS Limit	-32000 - 32000

RANGE

Test	GLDH
Unit	U / l
Report Name	GLDH
Data Mode	On Board
Control Interval	*
Inst. Factor	1.0 - 0.0
Technical Limit	0 - 70 U / l
Expected value	
(Male)	* - *
(Female)	* - *

STANDARD CONC.

(1)	0
(2)	*
(3)	
(4)	
(5)	
(6)	
K- FACTOR	

* Data entered by operator

INSTRUMENT SETTINGS FOR P MODULE

ANALYZE

CH/Test/Type	*/GLDH/SER
Assay/Time	RATE A/10
Point	21/34/0/0
Wave (2nd/Primary)	415/340
Sample Volume	
Normal	15/0/0
Decrease	2/0/0
Increase	30/0/0
Diluent	
○ Water	
● Diluent	
Reagent Volume	
R1	180/0/*/7
R2	0/0/*/0
R3	36/0/*/7
R4	0/0/*/0
Reagent Dummy Volume	
○ Type 1	● Type 2
ABS Limit	8000/DECREASE
Prozone Limit	0/0/0/0/0/LOWER
Cell Detergent	DETERGENT 1
Twin Test	CANCEL

CALIBRATION

Calibration Type	LINEAR
Point	2
Span	2
Weight	0
Isozyme Q	CANCEL
SD Limit	0.1
Duplicate Limit	5%/10
Sensitivity Lim.	-99999/99999
S1 ABS Limit	-32000/32000

RANGE

Unit	U/l
Report Name	GLDH
Data Mode	ON BOARD
Technical Limit	0/70
Repeat Limit	*/*
Expected value	
(Male)	*/*
(Female)	*/*

OTHERS

Standards	(1)	(2)	(3)	(4)	(5)	(6)
Calibrator Code	*	*	0	0	0	0
Concentration	0.0	*	0	0	0	0
Rack. No.	S001-1	*	0	0	0	0
Sample Volume	15	15	0	0	0	0
Diluted S Volume	0	0	0	0	0	0
Diluent Volume	0	0	0	0	0	0

* Data entered by operator

CALIBRATION

When setting up this method, it is essential that a factor is established with a calibrator. We recommend Randox Calibration Serum Level 3.

QUALITY CONTROL

Randox Assayed Multi-sera, Level 2 and Level 3 are recommended for daily quality control. Two levels of controls should be assayed at least once a day. Values obtained should fall within a specified range. If these values fall outside the range and repetition excludes error, the following steps should be taken:

1. Check instrument settings and light source.
2. Check cleanliness of all equipment in use.
3. Check water, contaminants i.e. bacterial growth may contribute to inaccurate results.
4. Check reaction temperature.
5. Check expiry date of kit and contents.
6. Contact Randox Laboratories Customer Technical Support, Northern Ireland (028) 94422413.

LINEARITY

The method is linear up to 50 U/l. In the event of a rerun, the linearity is extended to 525 U/l (Hitachi 917) or 420 U/l (Modular P).

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