

DRUG CONTROL (TDM CONTROL I)

CAT NO.	HD1667	LOT NO.	911DC
SIZE:	20 x 5ml	EXPIRY:	2026-12-28
GTIN:	05055273203578		

INTENDED USE

This product is intended for *in vitro* diagnostic use in the quality control of drug residue analysis on clinical chemistry systems. The Drug Controls are for the control of accuracy and precision.

DEVICE DESCRIPTION

The Drug Controls are supplied at 3 levels, level 1, 2 and 3. Target values and ranges are supplied for the analytes listed in the values section at 3 levels.

SAFETY PRECAUTIONS AND WARNINGS

For *in vitro* diagnostic use only. Do not pipette by mouth. Exercise the normal precautions required for handling laboratory reagents.

Human source material which has been added has been tested at donor level for the Human Immunodeficiency Virus (HIV 1, HIV 2) antibody, Hepatitis B Surface Antigen (HbsAg), and Hepatitis C Virus (HCV) antibody and found to be NON-REACTIVE. FDA approved methods have been used to conduct these tests.

However, since no method can offer complete assurance as to the absence of infectious agents, this material and all patient samples should be handled as though capable of transmitting infectious diseases and disposed of accordingly.

Health and Safety Data Sheets are available on request.

STORAGE AND STABILITY

OPENED: Store refrigerated (2 to 8°C). Reconstituted serum is stable for 4 weeks at +2 to +8°C if kept capped in original container and free from contamination. Only the required amount of product should be removed. After use, any residual product should NOT BE RETURNED to the original vial.

UNOPENED: Store refrigerated (2 to 8°C). Stable to expiration date printed on individual vials.

PREPARATION FOR USE

The Drug Controls are supplied lyophilised.

1. Carefully reconstitute each vial of lyophilised serum with exactly 5ml of distilled water at +20°C to 25°C. Close the bottle and allow to stand for 30 minutes before use. Ensure contents are completely dissolved by swirling gently. Avoid formation of foam. Do not shake.
2. Refer to the control section of the individual analyser application.
3. Refrigerate any unused material. Prior to reuse, mix contents thoroughly.

MATERIALS PROVIDED

Drug Control Level 1 20 x 5ml

MATERIALS REQUIRED BUT NOT PROVIDED

Volumetric Pipette

ASSIGNED VALUES

Due to the variation caused by test equipment, test reagents and laboratory technique, the quoted ranges are provided for guidance. It is recommended that these ranges are used until each laboratory has established its own ranges, based on individual laboratory requirements.

Each batch of serum is distributed to approximately 250 laboratories and values are assigned by a consensus of results obtained by these laboratories. A control range for individual parameters and for each parameter method is provided for each batch of serum. The control range is equivalent to the assigned mean ± 2 S.D.

If a method is unavailable, contact Randox Laboratories - Technical Services, Northern Ireland, tel: +44 (0) 28 9445 1070 or email Technical.Services@randox.com

EC	REP
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DRUG CONTROL LEVEL 1 (TDM CONTROL 1)

Cat. No. HD1667 Lot. No. 911DC Size 20 x 5 ml Expiry 2026-12-28

Range					
Analyte	unit	Target	low	high	methods
Amikacin	µmol/l	7.07	5.66	8.48	KIMS
	µg/ml	4.14	3.31	4.97	
	µmol/l	6.24	4.99	7.49	Turbidimetric
	µg/ml	3.65	2.92	4.38	
Caffeine	µmol/l	12.9	9.68	16.1	Gravimetric
	µg/ml	2.50	1.88	3.13	
Carbamazepine	µmol/l	12.4	9.92	14.9	Enzyme Immunoassay
	µg/ml	2.93	2.35	3.51	
	µmol/l	11.6	9.28	13.9	Chemiluminescence
	µg/ml	2.74	2.19	3.29	
	µmol/l	12.2	9.76	14.6	Turbidimetric
	µg/ml	2.88	2.31	3.45	
Cyclosporin	µmol/l	12.7	10.2	15.2	KIMS
	µg/ml	3.00	2.41	3.59	
	nmol/l	92.0	73.6	110	Enzyme Immunoassay
	ng/ml	111	88.5	134	
	nmol/l	87.4	69.9	105	Chemiluminescence
	ng/ml	105	84.1	126	
Digoxin	nmol/l	0.626	0.500	0.750	Chemiluminescence
	ng/ml	0.490	0.390	0.590	
	nmol/l	0.692	0.550	0.830	Enzyme Immunoassay
	ng/ml	0.540	0.430	0.650	
	nmol/l	0.765	0.610	0.920	KIMS
	ng/ml	0.600	0.480	0.720	
Ethosuximide	nmol/l	0.621	0.500	0.750	Turbidimetric
	ng/ml	0.490	0.390	0.590	
	µmol/l	226	181	271	Gravimetric
	µg/ml	32.0	25.7	38.4	
Gentamicin	µmol/l	4.66	3.73	5.59	Enzyme Immunoassay
	µg/ml	2.23	1.78	2.68	
	µmol/l	4.75	3.80	5.70	Chemiluminescence
	µg/ml	2.27	1.82	2.72	
	µmol/l	4.88	3.90	5.86	Turbidimetric
	µg/ml	2.33	1.86	2.80	
Lithium	µmol/l	3.57	2.86	4.28	KIMS
	µg/ml	1.71	1.37	2.05	
	µmol/l	5.45	4.36	6.54	EMIT
	µg/ml	2.61	2.08	3.14	
	mmol/l	0.540	0.475	0.605	Spectrophotometric
	mg/dl	0.375	0.330	0.420	
Methotrexate	µmol/l	0.400	0.320	0.480	Enzyme Immunoassay
	µg/ml	0.182	0.145	0.219	

DRUG CONTROL LEVEL 1 (TDM CONTROL 1)

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Range					
Analyte	unit	Target	low	high	methods
Methotrexate	µmol/l	0.360	0.288	0.432	Chemiluminescence
	µg/ml	0.164	0.131	0.197	
Paracetamol	mmol/l	0.170	0.136	0.204	Colorimetric
	mg/l	25.7	20.6	30.8	
	mmol/l	0.180	0.144	0.216	Enzymatic
	mg/l	27.2	21.8	32.6	
	mmol/l	0.200	0.160	0.240	Siemens Dimension Enzymatic
	mg/l	30.3	24.2	36.4	
	mmol/l	0.180	0.144	0.216	EMIT
	mg/l	27.2	21.8	32.6	
Phenobarbital	µmol/l	33.6	26.9	40.3	Enzyme Immunoassay
	µg/ml	7.80	6.24	9.36	
	µmol/l	33.0	26.4	39.6	Turbidimetric
	µg/ml	7.66	6.12	9.20	
	µmol/l	37.0	29.6	44.4	Chemiluminescence
	µg/ml	8.58	6.87	10.3	
	µmol/l	34.7	27.8	41.6	KIMS
	µg/ml	8.05	6.45	9.65	
Phenytoin	µmol/l	35.0	28.0	42.0	EMIT
	µg/ml	8.12	6.50	9.74	
	µmol/l	19.6	15.7	23.5	Enzyme Immunoassay
	µg/ml	4.95	3.96	5.94	
	µmol/l	20.4	16.3	24.5	Turbidimetric
	µg/ml	5.15	4.12	6.18	
	µmol/l	18.4	14.7	22.1	Chemiluminescence
	µg/ml	4.65	3.71	5.59	
Primidone	µmol/l	18.4	14.7	22.1	KIMS
	µg/ml	4.65	3.71	5.59	
	µmol/l	12.6	10.1	15.1	Gravimetric
	µg/ml	2.75	2.20	3.30	
	mmol/l	0.300	0.240	0.360	Colorimetric Trinder
	mg/dl	4.14	3.31	4.97	
	mmol/l	0.260	0.208	0.312	Enzymatic
	mg/dl	3.59	2.87	4.31	
Salicylic Acid	mmol/l	0.290	0.232	0.348	EMIT
	mg/dl	4.01	3.20	4.82	
	mmol/l	0.280	0.224	0.336	Spectrophotometric
	mg/dl	3.87	3.09	4.65	
	µmol/l	27.8	22.2	33.4	Chemiluminescence
	µg/ml	5.01	4.00	6.02	
	µmol/l	30.1	24.1	36.1	Enzyme Immunoassay
	µg/ml	5.42	4.34	6.50	
Theophylline	µmol/l	30.7	24.6	36.8	Turbidimetric
	µg/ml	5.53	4.43	6.63	
	µmol/l	29.6	23.7	35.5	KIMS
	µg/ml	5.33	4.27	6.39	

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Range					
Analyte	unit	Target	low	high	methods
Theophylline	µmol/l	28.9	23.1	34.7	EMIT
	µg/ml	5.21	4.16	6.26	
Tobramycin	µmol/l	4.23	3.38	5.08	Enzyme Immunoassay
	µg/ml	1.98	1.58	2.38	
	µmol/l	4.03	3.22	4.84	Turbidimetric
	µg/ml	1.89	1.51	2.27	
Valproic Acid	µmol/l	224	179	269	Enzyme Immunoassay
	µg/ml	32.3	25.8	38.8	
	µmol/l	215	172	258	Chemiluminescence
	µg/ml	31.0	24.8	37.2	
	µmol/l	218	174	262	Turbidimetric
	µg/ml	31.5	25.1	37.9	
Vancomycin	µmol/l	3.44	2.75	4.13	Enzyme Immunoassay
	µg/ml	5.11	4.09	6.13	
	µmol/l	3.41	2.73	4.09	Chemiluminescence
	µg/ml	5.07	4.06	6.08	
	µmol/l	3.38	2.70	4.06	Turbidimetric
	µg/ml	5.02	4.01	6.03	