





## \*\* TYPICAL VALUES \*\*

**Cat. No.** SN1085 **Size:** 20 x 5 ml

#### **INTENDED USE**

This product is intended for in vitro diagnostic use, as an unassayed control to monitor laboratory precision on clinical chemistry systems.

#### **DEVICE DESCRIPTION**

The Precision Bovine controls are supplied at 3 levels, level 1, 2 and 3.

#### **SAFETY PRECAUTIONS AND WARNINGS**

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

This control is manufactured from bovine serum. Human source material, which has been added, has been tested at donor level for the Human Immunodeficiency Virus (HIV I, 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 ( $+2^{\circ}$ C to  $+8^{\circ}$ C). Reconstituted serum is stable for 8 hours at  $+15^{\circ}$ C to  $+25^{\circ}$ C or 7 days at  $+2^{\circ}$ C to  $+8^{\circ}$ C, and 28 days when frozen once at  $-20^{\circ}$ C (see Limitations). Only the required amount of product should be removed. After use, any residual product should NOT BE RETURNED to the original vial.

#### **LIMITATIONS**

For Total & Prostatic Acid Phosphatase, the material should be stabilised by adding I drop (25 - 30 µl) of 0.7M Acetic acid solution to I ml of the serum. After stabilisation Total & Prostatic Acid Phosphatase is stable for 2 hours at +15°C to +25°C, 2 days at +2°C to +8°C, and 28 days when frozen once at -20°C.

Alkaline Phosphatase levels in the reconstituted serum will rise over the stability period. It is recommended that the reconstituted serum is allowed to stand for 1 hour at  $+15^{\circ}$ C to  $+25^{\circ}$ C before measurement.

Bilirubin in the serum is light sensitive and it is recommended that the serum is stored in the dark. Stored in the dark, it is stable for 2 days at  $+2^{\circ}$ C to  $+8^{\circ}$ C. Do not store at  $+15^{\circ}$ C to  $+25^{\circ}$ C. Do not freeze.

PSA is stable for 4 days at +2°C to +8°C, or 28 days in aliquots frozen at -20°C.

Bacterial contamination of the reconstituted serum will cause reductions in the stability of many components.

Different lot numbers of this control should not be interchanged, as the values vary from lot to lot. The control should not be used as a calibration material.

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

#### PREPARATION FOR USE

The Precision Bovine Multi-sera is supplied lyophilised.

- Carefully reconstitute each vial of lyophilised serum with exactly 5 ml of distilled water at +15°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**

Precision Bovine Multi-sera - Level 2 20 x 5 ml

### MATERIALS REQUIRED BUT NOT PROVIDED

Volumetric pipette

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Cat. No. SN1085 Size: 20 x 5 ml					
**TYPICAL VALUES**					
Analyte	unit	target	methods		
alpha-HBDH	U/I	118	DGKC 37°C		
	U/I	89	DGKC 30°C		
	U/I	67	DGKC 25°C		
Acid Phosphatase (Prostatic)	U/I	6.63	1-Naphthyl Phosphate substrate Kinetic 37°C		
Acid Phosphatase (Total)	U/I	14.6	1-Naphthyl Phosphate substrate Kinetic 37°C		
Albumin	g/l	38.1	Bromocresol Green		
	g/dl	3.81			
Alkaline Phosphatase	U/I	181	Diethanolamine buffer DEA 37°C		
	U/I	141	Diethanolamine buffer DEA 30°C		
	U/I	116	Diethanolamine buffer DEA 25°C		
	U/I	100	p-Nitrophenylphosphate AMP 37°C		
	U/I	78	p-Nitrophenylphosphate AMP 30°C		
	U/I	64	p-Nitrophenylphosphate AMP 25°C		
ALT (GPT)	U/I	59	Tris buffer no P5P IFCC/SFBC 37°C		
	U/I	44	Tris buffer no P5P IFCC/SFBC 30°C		
	U/I	33	Tris buffer no P5P IFCC/SFBC 25°C		
Amylase Total	U/I	129	Randox EPS Liquid 37°C		
	U/I	164	Randox - Ethylidene pNPG7 37°C		
AST (GOT)	U/I	37	Tris buffer no P5P IFCC/SFBC 37°C		
	U/I	25	Tris buffer no P5P IFCC/SFBC 30°C		
	U/I	18	Tris buffer no P5P IFCC/SFBC 25°C		
Bicarbonate	mmol/l	24.4	Enzymatic		
Bile Acids	µmol/l	24.6	4th Generation Colorimetric		
	µmol/l	23.7	5th Generation Colorimetric		
Bilirubin Direct	µmol/l	21.0	Diazo with Sulphanilic Acid		
	mg/dl	1.23			
Bilirubin Total	µmol/l	25.5	Diazo with Sulphanilic Acid		
	mg/dl	1.49			
Calcium	mmol/l	2.27	Cresolphthalein complexone		
	mg/dl	9.10			
Chloride	mmol/l	99.5	ISE direct		
Cholesterol	mmol/l	4.67	Cholesterol Oxidase		
	mg/dl	180			
CK Total	U/I	168	DGKC 37°C		
	U/I	105	DGKC 30°C		
	U/I	71	DGKC 25°C		
Copper	µmol/l	19.3	Colorimetric		
	μg/dl	123			
Cortisol	nmol/l	213	Radioimmunoassay		
	µg/dl	7.67			

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Creatinine	µmol/l	140	Alkaline picrate no deproteinization		
	mg/dl	1.58			
	μmol/l	143	Randox Enzymatic UV method		
	mg/dl	1.62			
D-3-Hydroxybutyrate	mmol/l	1.53	Enzymatic		
Free Thyroxine (FT4)	pmol/l	36.8	Chemiluminescence		
	pg/ml	28.7			
	ng/dl	2.87			
gamma-GT	U/I	55	Gamma glutamyl3-carboxy-4-nitroanilide 37°C		
	U/I	43	Gamma glutamyl3-carboxy-4-nitroanilide 30°C		
-	U/I	34	Gamma glutamyl3-carboxy-4-nitroanilide 25°C		
GLDH	U/I	18	DGKC 37°C		
	U/I	14	DGKC 30°C		
-	U/I	11	DGKC 25°C		
Glucose	mmol/l	5.96	Glucose oxidase		
	mg/dl	107			
Iron	µmol/l	23.4	Colorimetric without ppt.		
	µg/dl	131			
Lactate	mmol/l	3.65	Enzymatic Colorimetric		
	mg/dl	32.9			
LD (LDH)	U/I	242	Phosphate buffer DGKC 37°C		
	U/I	175	Phosphate buffer DGKC 30°C		
	U/I	123	Phosphate buffer DGKC 25°C		
Lipase	U/I	239	Turbidimetric 37°C		
	U/I	41	Randox Colorimetric 37°C		
Lithium	mmol/l	1.13	Colorimetric		
	mg/dl	0.78			
Magnesium	mmol/l	0.87	Xylidyl Blue		
	mg/dl	2.11			
Osmolality	mmol/kg	339	Freezing point depression		
Phosphate Inorganic	mmol/l	1.31	Phosphomolybdate UV		
	mg/dl	4.06			
Potassium	mmol/l	4.21	ISE direct		
Protein Total	g/I	59.2	Biuret reaction end point		
	g/dl	5.92			
PSA Total	ng/ml = μg/l	5.98	Chemiluminescence		
Sodium	mmol/l	137	ISE direct		
Thyroxine (T4)	nmol/l	89.8	Chemiluminescence		
	µg/dl	7.00			
TIDO	ng/ml	70.0	EF-LUBO( 1 U U U U U		
TIBC	µmol/l	43.4	FE+UIBC(saturation with iron)		
	µg/dl	243			
	µmol/l	38.5	Randox Direct		
	μg/dl	215			

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**TYPICAL VALUES**						
Analyte	unit	target	methods			
Triglycerides	mmol/l	1.04	Lipase/GPO-PAP no correction			
	mg/dl	92.0				
Triiodothyronine (T3)	nmol/l	2.02	Chemiluminescence			
	ng/ml	1.32				
	ng/dl	132				
Urea	mmol/l	6.39	Urease kinetic			
	mg/dl	38.4				
	mmol/l	8.16	Urease Berthelot			
	mg/dl	49.0				
	mmol/l	8.85	Urease hypochlorite			
	mg/dl	53.2				
Uric Acid (Urate)	mmol/l	0.320	Uricase Peroxidase with ascorbate oxidase @ 546nm			
	mg/dl	5.38				
Zinc	µmol/l	12.1	Colorimetric with deproteinisation			
	µg/dl	79.0				