

## BOVINE PRECISION MULTI SERA (BOV PREC CONTROL 3)

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

**Cat. No.** SEI086

**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 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°C to +8°C). Reconstituted serum is stable for 8 hours at +15°C to +25°C or 7 days at +2°C to +8°C and 30 days when frozen once at -20°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 1 drop (25 – 30 µl) of 0.7M Acetic acid solution to 1 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 30 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 be allowed to stand for 1 hour at +15°C to +25°C before measurement.

Bilirubin in the serum is light sensitive and it is recommended that the serum be stored in the dark. Stored in the dark it is stable for 4 days at +2°C to +8°C. Do not store at 15°C to +25°C. Do not freeze.

PSA is stable for 4 days at +2°C to +8°C, or 30 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.

1. 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 3      20 x 5 ml

#### MATERIALS REQUIRED BUT NOT PROVIDED

Volumetric Pipette

Revised 22 Jan 13 rw

## BOVINE PRECISION MULTI SERA LEVEL 3 (BOV PREC CONTROL 3)

Cat. No. SE1086 Size: 20 x 5 ml

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

Analyte	unit	target	methods
alpha-HBDH	U/l	371	DGKC 37°C
	U/l	280	DGKC 30°C
	U/l	210	DGKC 25°C
Acid Phosphatase (Prostatic)	U/l	28.5	1-Naphthyl Phosphate substrate Kinetic 37°C
Acid Phosphatase (Total)	U/l	44.9	1-Naphthyl Phosphate substrate Kinetic 37°C
Albumin	g/l	48.0	Bromocresol Green
	g/dl	4.80	
Alkaline Phosphatase	U/l	505	Diethanolamine buffer DEA 37°C
	U/l	393	Diethanolamine buffer DEA 30°C
	U/l	323	Diethanolamine buffer DEA 25°C
	U/l	418	p-Nitrophenylphosphate AMP 37°C
	U/l	326	p-Nitrophenylphosphate AMP 30°C
	U/l	267	p-Nitrophenylphosphate AMP 25°C
ALT (GPT)	U/l	129	Tris buffer no P5P IFCC/SFBC 37°C
	U/l	95	Tris buffer no P5P IFCC/SFBC 30°C
	U/l	73	Tris buffer no P5P IFCC/SFBC 25°C
Amylase Total	U/l	523	Randox EPS Liquid and BM/Roche EPS Liquid 37°C
	U/l	529	Randox - Ethylidene pNPG7 37°C
AST (GOT)	U/l	186	Tris buffer no P5P IFCC/SFBC 37°C
	U/l	126	Tris buffer no P5P IFCC/SFBC 30°C
	U/l	89	Tris buffer no P5P IFCC/SFBC 25°C
Bicarbonate	mmol/l	33.9	Enzymatic
Bile Acids	µmol/l	96.5	4th Generation Colorimetric
	µmol/l	86.5	5th Generation Colorimetric
Bilirubin Direct	µmol/l	37.5	Diazo with Sulphanilic Acid
	mg/dl	2.19	
Bilirubin Total	µmol/l	88.5	Diazo with Sulphanilic Acid
	mg/dl	5.18	
Calcium	mmol/l	2.99	Cresolphthalein complexone
	mg/dl	12.0	
Chloride	mmol/l	116	ISE indirect
Cholesterol	mmol/l	6.20	Cholesterol Oxidase
	mg/dl	239	
CK Total	U/l	429	DGKC 37°C
	U/l	269	DGKC 30°C
	U/l	182	DGKC 25°C
Copper	µmol/l	30.0	Colorimetric
	µg/dl	191	
Cortisol	nmol/l	515	Radioimmunoassay
	µg/dl	18.5	

## BOVINE PRECISION MULTI SERA LEVEL 3 (BOV PREC CONTROL 3)

Cat. No. SE1086 Size: 20 x 5 ml

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

Analyte	unit	target	methods
Creatinine	μmol/l	434	Alkaline picrate no deproteinization
	mg/dl	4.90	
	μmol/l	479	Randox Enzymatic UV method
	mg/dl	5.41	
D-3-Hydroxybutyrate	mmol/l	2.47	Enzymatic
Free Thyroxine (FT4)	pmol/l	55.2	Chemiluminescence
	pg/ml	43.1	
	ng/dl	4.31	
gamma-GT	U/l	128	Gamma glutamyl.-3-carboxy-4-nitroanilide 37°C
	U/l	101	Gamma glutamyl.-3-carboxy-4-nitroanilide 30°C
	U/l	79	Gamma glutamyl.-3-carboxy-4-nitroanilide 25°C
GLDH	U/l	22	DGKC 37°C
	U/l	17	DGKC 30°C
	U/l	14	DGKC 25°C
Glucose	mmol/l	16.1	Glucose oxidase
	mg/dl	290	
Iron	μmol/l	34.4	Colorimetric without ppt.
	μg/dl	192	
Lactate	mmol/l	4.66	Enzymatic Colorimetric
	mg/dl	42.0	
LD (LDH)	U/l	674	Phosphate buffer DGKC 37°C
	U/l	487	Phosphate buffer DGKC 30°C
	U/l	342	Phosphate buffer DGKC 25°C
Lipase	U/l	773	Turbidimetric 37°C
	U/l	137	Randox Colorimetric 37°C
Lithium	mmol/l	1.99	Colorimetric
	mg/dl	1.38	
Magnesium	mmol/l	1.41	Xylidyl Blue
	mg/dl	3.43	
Osmolality	mmol/kg	483	Freezing point depression
Phosphate Inorganic	mmol/l	2.25	Phosphomolybdate UV
	mg/dl	6.98	
Potassium	mmol/l	6.35	ISE indirect
Protein Total	g/l	73.2	Biuret reaction end point
	g/dl	7.32	
PSA Total	ng/ml = μg/l	35.9	Chemiluminescence
Sodium	mmol/l	152	ISE indirect
Thyroxine (T4)	nmol/l	166	Chemiluminescence
	μg/dl	12.9	
	ng/ml	129	
TIBC	μmol/l	53.2	FE+UIBC(saturation with iron)
	μg/dl	297	
	μmol/l	42.8	Randox Direct
	μg/dl	239	

## BOVINE PRECISION MULTI SERA LEVEL 3 (BOV PREC CONTROL 3)

Cat. No. SE1086 Size: 20 x 5 ml

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

Analyte	unit	target	methods
Triglycerides	mmol/l	2.70	Lipase/GPO-PAP no correction
	mg/dl	239	
Triiodothyronine (T3)	nmol/l	3.25	Chemiluminescence
	ng/ml	2.12	
	ng/dl	212	
Urea	mmol/l	22.6	Urease kinetic
	mg/dl	136	
	mmol/l	10.7	Urease Berthelot
	mg/dl	64.3	
	mmol/l	8.23	Urease hypochlorite
	mg/dl	49.5	
Uric Acid (Urate)	mmol/l	0.533	Uricase Peroxidase with ascorbate oxidase @ 546nm
	mg/dl	8.95	
Zinc	µmol/l	35.5	Colorimetric with deproteinisation
	µg/dl	232	