

105.1 - Clinical Laboratory Materials (gas, liquid, and solid forms)

The following SRMs are intended for calibrating apparatus and validating analytical methods used in clinical and pathology laboratories. Additional information on the serum materials is given in [Table 105.2](#).

PLEASE NOTE: The Freeze-Dried SRMs are listed at the reconstituted volume.

For further information see: [SP 260-36](#), [SP 260-72](#) and [SP 260-83](#)

PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

| SRM Description | 909c | 911c | 912b | 913b | 914b | 915b | 916a | 917c | 918c | 919b | 920 | 921a | 924a | 927e | 928 | 929a | 937 | 955d | 956d |
|--|--|-------------------|-------------|------------------|-------------------|---|--------------------|-----------------------------|---|---|-------------------|---------------------------------|--------------------------|--|---------------------|---------------------------|-------------------|---|---|
| Unit Size | Frozen Human Serum (3 vials x 2 mL) | Cholesterol (2 g) | Urea (25 g) | Uric Acid (10 g) | Creatinine (10 g) | Calcium Carbonate (20 g) | Bilirubin (100 mg) | D-Glucose (Dextrose) (50 g) | Potassium Chloride General and Ion Activity Standard (30 g) | Sodium Chloride (30 g) | D-Mannitol (50 g) | Cortisol (Hydrocortisone) (1 g) | Lithium Carbonate (30 g) | Bovine Serum Albumin (7% solution) (Total Protein Standard) (10 ampoules x 2.2 mL) | Lead Nitrate (30 g) | Magnesium Gluconate (5 g) | Iron Metal (50 g) | Toxic Metals and Metabolites in Frozen Human Blood (6 vials x 1.6 mL) | Electrolytes in Frozen Human Serum (6 ampoules x 2 mL) |
| Purity/Constituent (mass fraction in % unless otherwise noted) | Cholesterol, Elements, Creatinine, Total Glycerides, Transferrin, Urea, Uric Acid, Protein | 99.2 | 99.95 | 99.8 | 99.9 | WCaCo ₃ 99.907 WCa 40.0104 WCO ₃ 59.923 | 98.3 | 99.7 | WKCl 99.945 WK 52.421 WCl 47.5317 | WNaCl 99.835 WCl ⁻ 60.564 WNa ⁺ 39.2747 | 99.8 | 99.3 | 99.867* | BSA Conc. 67.38 g/L | 100.00 | Mg Conc. 5.362 | 99.90 | 3 Levels: lead, arsenic, cadmium, chromium, cobalt, manganese, mercury, selenium, uranium 2 Levels: ethylmercury, inorganic mercury, methylmercury | 3 Levels: Ca, Cl, Li, Mg, K, Na 3 Levels: ionized calcium, Phosphate, and Phosphorus |

* Conforms to National Committee for Clinical Laboratory Standards (NCCLS) specification ACC-1.

- Certified values are normal font
- Reference values are italicized
- Values in parentheses are for information only

105.1 - Clinical Laboratory Materials (gas, liquid, and solid forms)

The following SRMs are intended for calibrating apparatus and validating analytical methods used in clinical and pathology laboratories. Additional information on the serum materials is given in [Table 105.2](#).

PLEASE NOTE: The Freeze-Dried SRMs are listed at the reconstituted volume.

For further information see: [SP 260-36](#), [SP 260-72](#) and [SP 260-83](#)

PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

965b

Glucose in Frozen
Human Serum
(8 ampoules x 2 mL)

4 Levels: glucose

* Conforms to National Committee for Clinical Laboratory Standards (NCCLS) specification ACC-1.

- Certified values are normal font
- Reference values are italicized
- Values in parentheses are for information only

105.1 - Clinical Laboratory Materials (gas, liquid, and solid forms)

The following SRMs are intended for calibrating apparatus and validating analytical methods used in clinical and pathology laboratories. Additional information on the serum materials is given in [Table 105.2](#).

PLEASE NOTE: The Freeze-Dried SRMs are listed at the reconstituted volume.

For further information see: [SP 260-36](#), [SP 260-72](#) and [SP 260-83](#)

PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

| SRM | 967a | 968f | 971a | 972a | 998 | 1400 | 1401 | 1486 | 1595 | 1598a | 1949 | 1950 | 1951c | 1955 | 2365 | Cytor DNA BAC Mes |
|---|----------------------------------|--|--------------------------------|---|-----------------------|------------|------------------------------------|--|-------------|--|---|--|---|--|---|-------------------|
| Description | Creatinine in Frozen Human Serum | Fat-Soluble Vitamins in Frozen Human Serum | Hormones in Frozen Human Serum | Vitamin D Metabolites in Frozen Human Serum | Angiotensin I (Human) | Bone Ash | Trace Metals in Frozen Human Blood | Bone Meal | Tripalmitin | Inorganic Constituents in Animal Serum | Frozen Human Prenatal Serum | Metabolites in Frozen Human Plasma | Lipids in Frozen Human Serum | Homocysteine and Folate in Frozen Human Serum | BK Virus DNA Quantitative Standard | |
| Unit Size | (4 vials x 1 mL) | (2 vials x 1 mL) | (2 x 2 mL) | (4 vials x 1 mL) | (0.5 mg) | (50 g) | (4 vials x 1.6 mL) | (50 g) | (2 g) | (2 vials x 5 mL) | (8 vials (2 each level)) | (5 vials x 1 mL) | (4 vials x 1 mL) | (set (3) (1 each conc)) | (1 vial x 110 µL) | (1 vi |
| Purity/Constituent (mass fraction in % unless otherwise noted) | 2 Levels: creatinine | 2 Levels: vitamins and carotenoids | testosterone | 4 Levels: 25-hydroxyvitamin D ₂ , 25-hydroxyvitamin D ₃ , 24R,25-dihydroxyvitamin D ₃ , 3-epi-25-hydroxyvitamin D ₃ | 94.1 | 8 elements | 2 Levels, elements | 8 elements <i>†</i> <i>element</i> | 99.5 | 12 elements 5 elements | Total Thyroxine, Total Triiodothyronine <i>Copper, selenium, zinc, 25-hydroxyvitamin D₂, 25-hydroxyvitamin D₃, 3-epi-25-hydroxyvitamin D₃, vitamin D binding protein (VDBP)</i> | Cholesterol, Creatinine, Urea,Uric Acid, Homocysteine, Glucose, Total Glycerides, 3 Hormones, 8 Fatty Acids, 12 Amino Acids, 9 Vitamins, 4 Elements, 2 carotenoids, <i>Bilirubin, Selenium Species, Total protein, 6 PFCs, 19 Fatty Acids, 4 Amino Acids, 4 Vitamins, 2 Elements, 2 carotenoids, Vitamin D-binding protein</i> | 2 Levels: Total Cholesterol, Total Glycerides | 3 Levels: Homocysteine, 5-Methyltetrahydrofolic Acid | 1 Level: BK virus (copies per microliter) | cytor |

*** Conforms to National Committee for Clinical Laboratory Standards (NCCLS) specification ACC-1.**

- Certified values are normal font
- Reference values are italicized
- Values in parentheses are for information only

105.1 - Clinical Laboratory Materials (gas, liquid, and solid forms)

The following SRMs are intended for calibrating apparatus and validating analytical methods used in clinical and pathology laboratories. Additional information on the serum materials is given in [Table 105.2](#).

PLEASE NOTE: The Freeze-Dried SRMs are listed at the reconstituted volume.

For further information see: [SP 260-36](#), [SP 260-72](#) and [SP 260-83](#)

PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

| 2366a | 2378 | 2389a | 2668 | 2669 |
|---|---|---|---|--|
| measles virus (Townsend 147) for DNA measurements 100 µL x 150 µL | Fatty Acids in Frozen Human Serum (3 vials x 1 mL) | Amino Acids in 0.1 mol/L Hydrochloric Acid (5 ampoules x 1.2 mL) | Toxic Elements in Frozen Human Urine (10 vials x 1.5 mL) | Arsenic Species in Frozen Human Urine (10 vials x 1.5 mL) |

| | | | | |
|---|--------------------------|----------------|---|--|
| 1 Level: measles virus copies per micro liter) | 3 Levels: Fatty acids | 16 Amino Acids | 2 Levels: 14 Elements 2 Levels: 9 Elements | 2 levels: Arsenic species 2 levels: <i>Total Arsenic</i> |
|---|--------------------------|----------------|---|--|

*** Conforms to National Committee for Clinical Laboratory Standards (NCCLS) specification ACC-1.**

- Certified values are normal font
- Reference values are italicized
- Values in parentheses are for information only

105.1 - Clinical Laboratory Materials (gas, liquid, and solid forms)

The following SRMs are intended for calibrating apparatus and validating analytical methods used in clinical and pathology laboratories. Additional information on the serum materials is given in [Table 105.2](#).

PLEASE NOTE: The Freeze-Dried SRMs are listed at the reconstituted volume.

For further information see: [SP 260-36](#), [SP 260-72](#) and [SP 260-83](#)

PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

| SRM | 2921 | 2924 | 2925 | 2926 | 2927 | 2971 | 2972a | 2973 | 3030 | 3031 | 3033 | 3034 | 3036 | 3037 |
|---|-----------------------------------|-----------------------------|--|---|---|--|--|---|--|--|---------------------------------|---------------------------------|--------------------------------------|---|
| Description | Human Cardiac Troponin Complex | C-Reactive Protein Solution | Recombinant Human Serum Albumin Solution (Primary Reference Calibrator for Urine Albumin) (Frozen) | Recombinant Human Insulin-like Growth Factor 1 (Frozen) | ¹⁵ N-Labeled Recombinant Human Insulin-like Growth Factor 1 (Frozen) | 24R,25-Dihydroxyvitamin D ₃ Calibration Solution | 25-Hydroxyvitamin D Calibration Solutions | Vitamin D Metabolites in Frozen Human Serum (High Level) | Monomethylarsonic Acid Standard Solution | Dimethylarsinic Acid Standard Solution | Arsenobetaine Standard Solution | Arsenocholine Standard Solution | Arsenic Acid (AsV) Standard Solution | Arsenous Acid (AsIII) Standard Solution |
| Unit Size | (5 vials x 115 µL) | (3 vials x 1 mL) | (2 vials x 0.5 mL) | (3 vials x 0.25 mL) | (3 x 50 µL) | (5 ampoules x 1 mL) | (20 ampoules x 1.2 mL) | (2 vials x 1 mL) | (2 x 5 mL) | (2 x 5 mL) | (2 x 5 mL) | (2 x 5 mL) | (2 x 10 mL) | (2 x 10 mL) |
| Purity/Constituent (mass fraction in % unless otherwise noted) | Cardiac Troponin cTnI, cTnT, cTnC | CRP Conc. 20.6 µmol/L | albumin 14.4 nmol/g | 39.7 nmol/g | 98.72 | 24R,25-Dihydroxyvitamin D ₃ [24R,25(OH) ₂ D ₃] | 1 Level: 25-hydroxyvitamin D ₂ 2 Levels: 25-hydroxyvitamin D ₃ 1 Level: 3-Epi-25-hydroxyvitamin D ₃ | 25-hydroxyvitamin D ₃ 24R, 25-dihydroxyvitamin D ₃ | 17.46 mg/kg | 20.47 mg/kg | 19.06 mg/kg | 19.77 mg/kg | 0.0971 | 0.10442 |

* Conforms to National Committee for Clinical Laboratory Standards (NCCLS) specification ACC-1.

- Certified values are normal font
- Reference values are italicized
- Values in parentheses are for information only

105.1 - Clinical Laboratory Materials (gas, liquid, and solid forms)

The following SRMs are intended for calibrating apparatus and validating analytical methods used in clinical and pathology laboratories. Additional information on the serum materials is given in [Table 105.2](#).

PLEASE NOTE: The Freeze-Dried SRMs are listed at the reconstituted volume.

For further information see: [SP 260-36](#), [SP 260-72](#) and [SP 260-83](#)

PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

| 3667 | 3668 | 3669 | 3671 | 3672 | 3673 |
|--|---|---|---|--|--|
| Creatinine in Frozen Human Urine (1 bottle x 10 mL) | Mercury, Perchlorate, and Iodide in Frozen Human Urine (10 vials x 1.5 mL) | Arsenic Species in Frozen Human Urine (Elevated Levels) (5 vials x 1.5 mL) | Nicotine Metabolites in Human Urine (Frozen) (3 vials x 10 mL) | Organic Contaminants in Smokers' Urine (Frozen) (5 vials x 10 mL) | Organic Contaminants in Non-Smokers' Urine (Frozen) (5 vials x 10 mL) |
| 61.8 mg/dL | 2 Levels: Hg, Nitrate, Perchlorate 2 Levels: <i>I</i> , Thiocyanate | Arsenic Species | 2 Levels: Nicotine, Cotinine 1 Level: 3-hydroxycotinine <i>Other Nicotine Metabolites</i> | Hydroxylated PAHs Pthalate Metabolites Phenol Metabolites VOC Metabolites | Hydroxylated PAHs Pthalate Metabolites Phenol Metabolites VOC Metabolites |

* Conforms to National Committee for Clinical Laboratory Standards (NCCLS) specification ACC-1.

- Certified values are normal font
- Reference values are italicized
- Values in parentheses are for information only