

Assay Chart

Assay (TDef name)	Test definition version	Test per well	Test Duration (min)	Reagent Onboard Stability (days)	Reagent Storage Temp	Sample Types	Reagent pack chimney	Sample Volume (µL)	Assay Reaction			Assay Ranges				Calibration			
									Assay Principle	Reaction Type	Wavelength (Å)	Assay Measuring Interval (Common Units)	Expected Values (Common Units)	Dilution Factor	Extended Range (Common Units)	Calibrator Name	Stability (days)**	Lot Calibration Interval (days)	Pack Calibration Interval (days)
Acetaminophen (Acet)	1.2	150	10.0	14	2–8°C	S;Li Hep P	Yes	6.0	Colorimetric: acyl amidohydrolase	EPA	596, 805	0.2–20.0 mg/dL	1.0–2.0 mg/dL	3	0.2–60.0 mg/dL	TOX CAL	3	62	1
Alanine Aminotransferase (ALT)	1.7	425	10.0	30	2–8°C	S;Li Hep P	No	25.0	Modified IFCC	ENZ	340, 410	7–1100 U/L	10–49 U/L	3	3300 U/L	ENZ 2 CAL	30	131	30
Alanine Aminotransferase P5P (ALTPLC)	1.3	520	10.0	19 ^{†§}	2–8°C	S;Li Hep P	No	25.0	IFCC	ENZ	340, 410	9–1000 U/L	7–40 U/L	6	6000 U/L	ENZ 2 CAL	30	130	4
Albumin BCG (Alb)	1.2	850	10.0	60	15–25°C	S;Li Hep P	No	2.0	Dye Binding: bromocresol green	EPA	596, 694	1.0–6.0 g/dL	3.2–4.8 g/dL	2	12.0 g/dL	CHEM CAL	2	97	60
Albumin BCP (AlbP)	1.2	800	3.0	20	2–8°C	S;Li Hep P;K EDTA P	No	4.0	Dye Binding: bromocresol purple	EPA	596, 694	0.5–8.0 g/dL	3.4–5.0 g/dL	---	---	AlbP CAL	8 hrs	30	8
Alkaline Phosphatase, Concentrated (ALP_2c)	1.1	600	8.0	30	2–8°C	S;Li Hep P	Yes	10.0	IFCC Standardization	ENZ	410, 478	10–1000 U/L	46–116 U/L	2.3	10–2300 U/L	ALP_2 CAL	30	60	17
Alpha-1-acid Glycoprotein (AAG)	1.4	100	10.0	30	2–8°C	S;Li Hep P;K EDTA P	Yes	3.2	PEG-enhanced immunoturbidimetric	EPA	340, 596	5.0–612.0 mg/dL	58.2–154.8 mg/dL	3	5.0–1836 mg/dL	LSP CAL	28	60	14
Alpha-1-antitrypsin (AAT)	1.2	90	10.0	30	2–8°C	S;Li Hep P	No	2.7	PEG-enhanced immunoturbidimetric	EPA	340, 596	5–500 mg/dL	78–200 mg/dL	2	1000 mg/dL	LSP CAL	28	60	7
Ammonia (Amm)	1.5	60	10.0	30	2–8°C	Li Hep P;K EDTA P	No	25.0	Enzymatic	RRA	340, 694	17–1277 µg/dL	19–54 µg/dL for adults	2	17–2554 µg/dL	CHEM III CAL	30	30	3
Amylase (Amylas (serum, plasma))	1.2	175	9.0	30	2–8°C	S;Li Hep P	No	16.0	Ethylidene Blocked-pNPG7	ENZ	410, 694	5–1500 U/L	30–118 U/L	3	4500 U/L	---	---	---	1
Amylase (Amylas (urine))	1.2	175	9.0	30	2–8°C	Urine	No	16.0	Ethylidene Blocked-pNPG7	ENZ	410, 694	5–1500 U/L	≤ 650 U/L	3	4500 U/L	---	---	---	1
Amylase_2 (AMY_2)	1.1	175	9.0	31	2–8°C	S;Li Hep P;Urine	No	16.0	Ethylidene Blocked-pNPG7	ENZ	410, 694	20–1500 U/L	Serum and plasma: 30–118 U/L Urine: ≤ 650 U/L	3	20 – 4500 U/L	SPCL CHEM CAL	7	62	31

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Anti-Streptolysin-O_2 (ASO_2)	1.1	200	10.0	30	2–8°C	S;Li Hep P;K EDTA P	No	7.5	Latex-enhanced immunoturbidimetric	EPA	571	25.0–1000 IU/mL	Children (preschool) ≤ 100.0 IU/mL Children (school age) ≤ 250.0 IU/mL Adults ≤ 200.0 IU/mL Siemens-determined adult reference range ≤ 194.0 IU/mL	2	2000 IU/mL	LSP CAL	28	60	30
Apolipoprotein A-1 (APO A1)	1.3	75	10.0	14	2–8°C	S;Li Hep P	No	5.0	PEG-enhanced immunoturbidimetric	EPA	340, 694	15–200 mg/dL	Males: 79–169 mg/dL Females: 76–214 mg/dL	2	400 mg/dL	APO A1 & B CAL	28	60	14
Apolipoprotein B (APO B)	1.3	75	10.0	30	2–8°C	S;Li Hep P	No	5.0	PEG-enhanced immunoturbidimetric	EPA	340, 694	15–200 mg/dL	Males: 46–174 mg/dL Females: 46–142 mg/dL	2	400 mg/dL	APO A1 & B CAL	28	60	30
Aspartate Aminotransferase (AST)	1.7	425	10.0	30	2–8°C	S;Li Hep P	No	25.0	Modified IFCC	ENZ	340, 410	8–1000 U/L	< 34 U/L	6	6000 U/L	ENZ 2 CAL	30	131	30
Aspartate Aminotransferase P5P (ASTPLC)	1.3	520	10.0	30 ^{†§}	2–8°C	S;Li Hep P	No	25.0	IFCC	ENZ	340, 410	8–1000 U/L	13–40 U/L	6	6000 U/L	ENZ 2 CAL	30	130	11
Calcium (Ca (Serum/plasma))	1.3	445	8.0	30	15–25°C	S;Li Hep P	Yes	16.0	CPC	EPA	545, 658	1–15 mg/dL	8.3–10.6 mg/dL	2	30.0 mg/dL	CHEM CAL	2	33	3
Calcium (Ca (Urine))	1.2	445	8.0	30	15–25°C	Urine	Yes	16.0	CPC	EPA	545, 658	1–30 mg/dL	100–300 mg/day	2	60.0 mg/dL	CHEM CAL	2	33	3
Calcium (Arsenazo) (Serum/plasma) (CA_2)	1.3	1025	3.0	63	15–25°C	S;Li Hep P	No	4.0	Arsenazo - Colorimetric	EPA	658, 694	1–16 mg/dL	8.7–10.4 mg/dL	2	1–32.0 mg/dL	CHEM CAL	48 hrs	63	63
Calcium (Arsenazo) (Urine) (CA_2)	1.3	1025	3.0	63	15–25°C	Urine	No	4.0	Arsenazo - Colorimetric	EPA	658, 694	1–32 mg/dL	100–300 mg/day	2	1–160.0 mg/dL	CHEM CAL	48 hrs	63	63
Carbamazepine (Carb)	1.3	50	8.0	30	2–8°C	S;Li Hep P	No	3.8	PETINIA	EPA	545, 694	0.4–20.0 µg/mL	4.0–12.0 µg/mL	2	0.4–40.0 µg/mL	DRUG CAL II	30	30	7
Carbon Dioxide, Concentrated (CO2_c)	1.2	950	2.0	27	2–8°C	S;Li Hep P	No	5.7	Enzymatic	2PA	410, 478	10.0–40.0 mEq/L	20.0–31.0 mEq/L	---	---	CO2 CAL	30	30	6
Cholesterol_2 (Chol_2)	1.2	1050	10.0	26	2–8°C	S;Li Hep P	No	4.0	Colorimetric: cholesterol esterase and cholesterol oxidase conversion followed by a Trinder endpoint	EPA	505, 694	25–618 mg/dL	Low-risk levels (desirable) < 200 mg/dL Moderate-risk levels (borderline) 200–239 mg/dL High-risk levels ≥ 240 mg/dL	2	1236 mg/dL	CHEM CAL	2	50	7
Cholinesterase (CHE)	1.1	68	9.0	30 ^{†§}	2–8°C	S;Li Hep P	No	2.0	Butyrylthiocholine substrate	ENZ	410, 596	1,500–30,000 U/L	7000–19,000 U/L	2	1500–60,000 U/L	ENZ 1 CAL	30	120	7

Assay availability is dependent on regulatory status in each country.

Footnotes begin on page 13.

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Complement C3 (C3)	1.3	100	10.0	30	2–8°C	S	No	4.5	PEG-enhanced immunoturbidimetric	EPA	340, 694	0.5–500.0 mg/dL	Newborns 58–108 mg/dL 3 months 67–124 mg/dL 6 months 74–138 mg/dL 9 months 78–144 mg/dL 12 months 80–150 mg/dL 2–10 years 80–150 mg/dL 12–18 years 85–160 mg/dL 20 years 82–160 mg/dL 30 years 84–160 mg/dL 40–70 years 90–170 mg/dL	2.25	0.5–1125.0 mg/dL	LSP CAL	28	60	14
Complement C4 (C4)	1.4	100	10.0	30	2–8°C	S	No	6.0	PEG-enhanced immunoturbidimetric	EPA	340, 694	0.4–140.0 mg/dL	12.0–36.0 mg/dL	3	0.4–420.0 mg/dL	LSP CAL	28	60	14
C-Reactive Protein_2 (CRP_2)	1.3	250	8.0	30	2–8°C	S;Li Hep P	No	4.0	Latex-enhanced immunoturbidimetric	EPA	571	0.4–30.4 mg/dL	< 1.0 mg/dL	3	91.2 mg/dL	CRP_2 CAL	60	60	30
Creatine Kinase (CK_L)	1.1	166	10.0	29	2–8°C	S;Li Hep P	No	4.5	Enzymatic	ENZ	340, 596	15–1300 U/L	Males 46–171 U/L Females 34–145 U/L	6	7800 U/L	ENZ 3 CAL	30	202	21
Creatinine_2 (Crea_2 (serum/plasma))	1.4	736	8.0	17	15–25°C	S;Li Hep P	Yes	24.0	Jaffe, alkaline picrate, kinetic with blank rate correction	RRA	505, 571	0.15–30.00 mg/dL	Males 0.70–1.30 mg/dL Females 0.55–1.02 mg/dL	2	60 mg/dL	CHEM CAL	2	180	6
Creatinine_2 (Crea_2 (urine))	1.3	736	8.0	17	15–25°C	Urine	Yes	24.0	Jaffe, alkaline picrate, kinetic with blank rate correction	RRA	505, 571	3.00–245.00 mg/dL	Males 950–2490 mg/day Female 600–1800 mg/day	3	735 mg/dL	CHEM CAL	2	180	6
Cystatin C_2 (CYSC_2)	1.2	100	10.0	40	2–8°C	S;Li Hep P;K EDTA P	No	5.2	Latex-enhanced immunoturbidimetric	EPA	571, 805	0.25–8.93 mg/L	0.64–1.23 mg/L	3	0.25–26.79 mg/L	Cystatin C_2 Calibrators (CYSC_2 CAL)	60	61	40
Digoxin (Dgn)	1.3	200	10.0	30	2–8°C	S;Li Hep P	No	15.6	Latex-enhanced immunoturbidimetric	EPA	694	0.14–5.00 ng/mL	0.80–2.00 ng/mL	2	0.14–10.00 ng/mL	TDM CAL	7	60	7
Direct Bilirubin 2 (DBil_2)	1.3	224	10.0	30	2–8°C	S;Li Hep P	No	14.3	Vanadate oxidation	EPA	451, 545	0.1–15.0 mg/dL	≤ 0.3 mg/dL	1.5	0.1–22.5 mg/dL	CHEM CAL	8 hrs	60	30
Direct HDL Cholesterol (D_HDL)	1.2	224	8.0	30	2–8°C	S;Li Hep P	No	5.0	Elimination/catalase	2PA	596, 694	20.0–129.0 mg/dL	Adults Serum/plasma Low (undesirable, high risk): < 40.0 mg/dL High (desirable, low risk): ≥ 60.0 mg/dL	2	258.0 mg/dL	HDL/LDL CAL	3	60	30
Enzymatic Creatinine_2 (ECre_2 (serum/plasma))	1.4	175	10.0	30	2–8°C	S;Li Hep P;K EDTA P	No	13.0	Enzymatic	EPA	596, 694	0.1–30.00 mg/dL	Adult males Serum/Plasma 0.6–1.1 mg/dL Adult females Serum/Plasma 0.5–0.8 mg/dL	5	0.10–150 mg/dL	CHEM CAL	2	180	30

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Enzymatic Creatinine_2 (ECre_2 (urine))	1.3	175	10.0	30	2–8°C	Urine	No	13.0	Enzymatic	EPA	596, 694	1.0–245.00 mg/dL	Adult males Urine 800–2000 mg/day Adult females Urine 600–1800 mg/day	5	1.00–1,225 mg/dL	CHEM CAL	2	180	30
Enzymatic Hemoglobin A1c (A1c_E)	1.1	150	10.0	63	2–8°C	Whole blood; Hemolysate	No	4.5	Enzymatic	EPA	658, 805	3.80–14.00 %HbA1c	< 5.7%: Normal 5.7–6.4%: Prediabetes ≥ 6.5%: Diabetic	---	---	A1c_E CAL	11	180	63
Ethyl Alcohol (ETOH)	1.2	150	8.0	30	2–8°C	S;Li Hep P;Sodium Hep P;K EDTA P;Sodium fluoride/K oxalate P;Urine	No	8.0	Enzymatic reaction	RRA	340, 410	3.0–300.0 mg/dL	Varied. Reportedly fatal 400.0 mg/mL	3	3.0–900.0 mg/dL	TOX CAL	3	60	10
Fructosamine (Fruc)	1.1	100	10.0	30	2–8°C	S;Li Hep P;K EDTA P	No	16.0	Colorimetric end-point reaction	EPA	596, 694	30–1000 µmol/L	122–236 µmol/L	---	---	Fruc CAL	28	180	30
Gamma-Glutamyl Transferase (GGT)	1.1	224	10.0	22 ^s	2–8°C	S;Li Hep P	No	10.0	Modified IFCC	ENZ	410, 478	7–1200 U/L	Adult males Serum/plasma < 73 U/L Adult females Serum/plasma < 38 U/L	3	7–3600 U/L	ENZ 1 CAL	30	60	22
Gentamicin (Gent)	1.4	50	8.0	30 ^s	2–8°C	S;Li Hep P	No	3.8	PETINIA	EPA	545, 694	0.5–12.0 µg/mL	4.0–10.0 µg/mL	2	0.5–24.0 µg/mL	DRUG CAL II	30	30	7
Glucose Hexokinase_3 (serum/plasma) (GluH_3)	1.2	780	7.0	30	2–8°C	S;Li Hep P;K EDTA P;Sodium fluoride/K oxalate P	No	3.4	Hexokinase	EPA	340, 410	4–700 mg/dL	Adults 74–106 mg/dL Newborn 40–60 mg/dL Newborn > 1 day 50–80 mg/dL Child 60–100 mg/dL	3	2100 mg/dL	CHEM CAL	2	182	30
Glucose Hexokinase_3 (urine) (GluH_3)	1.2	780	7.0	30	2–8°C	Urine	No	3.4	Hexokinase	EPA	340, 410	4–700 mg/dL	Adults < 0.5 g/day	3	2100 mg/dL	CHEM CAL	2	182	30
Glucose Hexokinase_3 (CSF) (GluH_3)	1.2	780	7.0	30	2–8°C	CSF	No	3.4	Hexokinase	EPA	340, 410	4–700 mg/dL	Adults: 40–70 mg/dL, Infant/child: 60–80 mg/dL	3	2100 mg/dL	CHEM CAL	2	182	30
Glucose Oxidase (serum/plasma) (GluO)	1.2	700	10.0	30	2–8°C	S;Li Hep P	No	4.0	Glucose Oxidase Trinder	EPA	505, 694	6–750 mg/dL	74–106 mg/dL	2	1,500 mg/dL	CHEM CAL	2	35	7
Glucose Oxidase (urine) (GluO)	1.2	700	10.0	30	2–8°C	Urine	No	4.0	Glucose Oxidase Trinder	EPA	505, 694	6–750 mg/dL	Adults: < 0.5 g/day	2	1,500 mg/dL	CHEM CAL	2	35	7

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Glucose Oxidase (CSF) (GluO)	1.2	700	10.0	30	2–8°C	CSF	No	4.0	Glucose Oxidase Trinder	EPA	505, 694	6–750 mg/dL	Adults: 40–70 mg/dL Infants and children: 60–80 mg/dL	2	1,500 mg/dL	CHEM CAL	2	35	7
Haptoglobin (Hapt)	1.3	75	10.0	30 ^{†§}	2–8°C	S	No	3.4	PEG-enhanced immunoturbidimetric	EPA	340, 694	1–340 mg/dL	40–280 mg/dL	---	---	LSP CAL	28	10	30
High Sensitivity C-Reactive Protein (hsCRP)	1.2	185	8.0	30	2–8°C	S;Li Hep P;K EDTA P	No	10.0	Latex-enhanced immunoturbidimetric	EPA	571, 658	0.16–10.0 mg/L	Low risk: <1 mg/L Average risk: >1 and <3 mg/L High risk: >3 mg/L	20	200 mg/L	hsCRP CAL	60	60	30
Immunoglobulin A_2 (IgA_2)	1.3	75	10.0	30	2–8°C	S;Li Hep P	No	4.0	PEG-enhanced immunoturbidimetric	EPA	340, 596	33.0–540.0 mg/dL	40.0–350.0 mg/dL	10	15.0–5,400.0 mg/dL	LSP CAL	28	60	30
Immunoglobulin G_2 (IgG_2)	1.3	90	10.0	30	2–8°C	S;Li Hep P	No	2.0	PEG-enhanced immunoturbidimetric	EPA	340, 694	140–3400 mg/dL	650–1,600 mg/dL	10	70–34,000 mg/dL	LSP CAL	28	60	30
Immunoglobulin M_2 (IgM_2)	1.3	90	10.0	30	2–8°C	S;Li Hep P;K EDTA P	No	9.0	PEG-enhanced immunoturbidimetric	EPA	340, 694	21.0–330.0 mg/dL	50.0–300.0 mg/dL	10	8.0–3,300.0 mg/dL	LSP CAL	28	60	30
Inorganic Phosphorus (IP (serum/plasma))	1.4	850	10.0	30	15–25°C	S;Li Hep P	No	8.0	Phosphomolybdate	EPA	340, 658	0.3–20 mg/dL	Adult 2.4–5.1 mg/dL	2	0.3–40.0 mg/dL	CHEM CAL	2	180	7
Inorganic Phosphorus (IP (urine))	1.4	850	10.0	30	15–25°C	Urine	No	8.0	Phosphomolybdate	EPA	340, 658	4–100 mg/dL	0.4–1.3 g/day (on unrestricted diet)	2.6	4.0–260 mg/dL	CHEM CAL	2	180	7
Iron_2 (Iron_2)	1.3	224	10.0	30	2–8°C	S;Li Hep P	No	25.0	Ferrozine	EPA	571, 658	2–1000 µg/dL	Male serum 65–175 µg/dL Female serum 50–170 µg/dL	2	2000 µg/dL	CHEM CAL	2	180	30
Lactate (Lac)	1.3	95	4.0	30 ^{†§}	2–8°C	Li Hep P K EDTA P;Sodium fluoride/ K oxalate P;	No	4.0	Lactate oxidase to pyruvate and hydrogen peroxide	EPA	545, 694	0.6–110.0 mg/dL	4.5–19.8 mg/dL	---	---	SPCL CHEM CAL	7	62	30
Lactate_2 (Lac_2)	1.1	95	4.0	30 [§]	2–8°C	;Li Hep P; K EDTA Plasma; Sodium fluoride/K oxalate Plasma; CSF	No	4.0	Lactate oxidase to pyruvate and hydrogen peroxide	EPA	545, 694	Plasma: 0.6–110.0 mg/dL CSF: 0.9–70 mg/dL	Plasma: 4.5–19.8 mg/dL CSF: 5.4–19.8 mg/dL	---	CSF: 0.9–140 mg/dL	SPCL CHEM CAL	7	62	30
Lactate Dehydrogenase L-P (LDLP)	1.8	224	9.0	28	2–8°C	S;Li Hep P	No	14.0	Lactate / NAD	ENZ	340, 410	14–750 U/L	120–246 U/L	6	14–4500 U/L	ENZ 1 CAL	30	60	28

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LDL Cholesterol Direct (DLDL)	1.2	200	10.0	15	2–8°C	S;Li Hep P	No	5.0	Elimination/catalase	EPA	596, 694	5.0–1000.0 mg/dL	Adults Optimal: < 100.0 mg/dL Near optimal: 100.0–129.0 mg/dL Borderline high: 130.0–159.0 mg/dL High: 160.0–189.0 mg/dL Very high: > 190.0 mg/dL	---	---	HDL/LDL CAL	3	121	15
Lidocaine (LIDO)	1.3	50	8.0	31	2–8°C	S;Sodium Hep P;K EDTA P	No	7.5	PETINIA	EPA	545, 694	0.5–12.0 µg/mL	1.5–5.0 µg/mL	2	0.5–24.0 µg/mL	DRUG CAL II	30	61	18
Lipase (Lip)	1.2	160	8.0	9	2–8°C	S;Li Hep P	No	3.0	Colorimetric rate	ENZ	571, 694	8–700 U/L	12–53 U/L	5	9–3500 U/L	ENZ 1 CAL	30	61	9
Lipoprotein (Lp(a))	1.3	100	10.0	30	2–8°C	S;Li Hep P	No	9.0	Latex-enhanced immunoturbidimetric	EPA	694	10.00–85.00 mg/dL	< 30.00 mg/dL	---	---	Lp(a) CAL	14	60	30
Lithium (Li)	1.1	100	10.0	13	2–8°C	S;Sodium Hep P;K EDTA P	Yes	13.0	Colorimetric endpoint chemistry	EPA	505, 694	0.10–3.00 mmol/L	1.00–1.20 mmol/L	2	0.10–6.00 mmol/L	CHEM CAL	2	63	4
Magnesium (Mg (serum/plasma))	1.3	200	8.0	14	2–8°C	S;Li Hep P	Yes	12.0	Xylydyl Blue	EPA	505, 694	0.50–5.00 mg/dL	Adult 1.60–2.60 mg/dL	2	10.00 mg/dL	CHEM CAL	2	180	3
Magnesium (Mg (urine))	1.3	200	8.0	14	2–8°C	Urine	Yes	12.0	Xylydyl Blue	EPA	505, 694	1.00–14.00 mg/dL	Adult 24–255 mg/24 hours	2	28.00 mg/dL	CHEM CAL	2	180	3
Microalbumin_2 (µALB_2)	1.4	105	10.0	30	2–8°C	Urine	Yes	13.7	PEG-enhanced immunoturbidimetric	EPA	340, 596	0.3–38.0 mg/dL	< 30 mg/day for adults	10	380 mg/dL	µALB_2 CAL	60	180	30
Mycophenolic Acid (MPA) [OUS]	1.2	150	9.0	33	2–8°C	;Li Hep P K EDTA P;	No	5.7	EMIT	RRA	340, 410	0.10–15.00 µg/mL	No established therapeutic range exists for mycophenolic acid in plasma.	---	0.1–30.0 µg/mL	Emit 2000 Mycophenolic Acid Calibrators (0, 0.5, 2, 5, 10, 15 µg/mL)	---	63	6
N-Acetylprocainamide (NAPA)	1.3	50	7.0	31	2–8°C	S;Li Hep P;Sodium Hep P K EDTA P;	No	2.5	PETINIA	EPA	545, 694	0.5–30.0 µg/mL	The combined procainamide and N-acetylprocainamide therapeutic range is 10–30 µg/mL.	2	0.5–60.0 µg/mL	DRUG CAL II	30	61	12
Pancreatic Amylase (PAmy)	1.2	215	9.0	30	2–8°C	S	No	16.0	Antibody-blocked colorimetric amylase	ENZ	410, 694	5–1500 U/L	13.0–53.0 U/L	5	5–7,500 U/L	---	---	---	1
Pancreatic Amylase_2 (serum) (Pamy_2) [OUS]	1.2	215	9.0	31	2–8°C	S	No	16.0	Enzymatic reaction	ENZ	410, 694	20–1500 U/L	Serum: 13–53 U/L Spontaneously voided urine: Male 7–356 U/L Female 13–319 U/L	5	20–7500 U/L	SPCL CHEM CAL	7	62	31

Assay availability is dependent on regulatory status in each country.

Footnotes begin on page 13.

Assay (TDef name)	Test definition version	Test per well	Test Duration (min)	Reagent Onboard Stability (days)	Reagent Storage Temp	Sample Types	Reagent pack chimney	Sample Volume (µL)	Assay Reaction			Assay Ranges				Calibration			
									Assay Principle	Reaction Type	Wavelength (λ)	Assay Measuring Interval (Common Units)	Expected Values (Common Units)	Dilution Factor	Extended Range (Common Units)	Calibrator Name	Stability (days)**	Lot Calibration Interval (days)	Pack Calibration Interval (days)
Pancreatic Amylase_2 (urine) (Pamy_2) [OUS]	1.2	215	9.0	31	2–8°C	Urine	No	16.0	Enzymatic reaction	ENZ	410, 694	20–1500 U/L	Serum: 13–53 U/L Spontaneously voided urine: Male 7–356 U/L Female 13–319 U/L	5	20–7500 U/L	SPCL CHEM CAL	7	62	31
Phenobarbital (Phnb)	1.3	50	8.0	30 ^s	2–8°C	S;Li Hep P	No	5.0	PETINIA	EPA	545, 694	3.0–80.0 µg/mL	15.0–40.0 µg/mL	2	3.0–160.0 µg/mL	DRUG CAL	90	30	7
Phenytoin (Phny)	1.4	50	8.0	30 ^s	2–8°C	S;Li Hep P	No	5.0	PETINIA	EPA	545, 694	2.0–40.0 µg/mL	10.0–20.0 µg/mL	2	2.0–80.0 µg/mL	DRUG CAL	90	28	7
Prealbumin (PreAlb)	1.3	100	10.0	30	2–8°C	S	No	7.5	PEG-enhanced immunoturbidimetric	EPA	340	5.0–70.0 mg/dL	10.0–40.0 mg/dL	2	140.0 mg/dL	LSP CAL	28	60	7
Procainamide (PROC)	1.3	50	7.0	31	2–8°C	S;Li Hep P; Sodium Hep P K EDTA P;	No	2.5	PETINIA	EPA	545, 694	0.5–20.0 µg/mL	4.0–12.0 µg/mL	2	0.5–40.0 µg/mL	DRUG CAL II	30	61	18
Rheumatoid Factor (RF)	1.4	90	10.0	21	2–8°C	S	No	11.5	Latex-enhanced immunoturbidimetric	EPA	571, 805	3.5–90.0 IU/mL	< 14 IU/mL	10	900 IU/mL	LSP CAL	28	60	14
Salicylate (Sal)	1.3	150	10.0	30	2–8°C	S;Li Hep P	No	8.0	Colorimetric	EPA	340, 410	3.0–100.0 mg/dL	Toxic >30 mg/dL	4	3.0–400.0 mg/dL	TOX CAL	3	180	21
Tacrolimus (TACR)	1.2	100	6.0	31	2–8°C	K EDTA Whole blood	No	25.0	EMIT	RRA	340	2.0–30.0 ng/mL	No firm therapeutic range exists for tacrolimus in whole blood.	0	2.0–80.0 ng/mL	Emit 2000 Tacrolimus Calibrators (0, 2.5, 5, 10, 20, 30 ng/mL)	56	64	10
Theophylline (Theo)	1.3	50	6.0	30 ^s	2–8°C	S;Li Hep P	No	5.0	PETINIA	EPA	545, 694	2.0–40.0 µg/mL	10–20 µg/mL	2	2.0–80.0 µg/mL	DRUG CAL	90	30	7
Tobramycin (Tob)	1.4	50	9.0	30 ^s	2–8°C	S;Li Hep P	No	3.8	PETINIA	EPA	545, 694	0.3–12.0 µg/mL	4–10 µg/mL	2	0.3–24.0 µg/mL	DRUG CAL II	30	30	7
Total Bilirubin_2 (TBil_2)	1.4	224	10.0	30	2–30°C	S;Li Hep P	No	14.3	Vanadate oxidation	EPA	451, 545	0.15–35.0 mg/dL	0–1 day: <8.0 mg/dL 1–2 days: <12.0 mg/dL 3–5 days: <16.0 mg/dL > 5 days–60 years: 0.3–1.2 mg/dL 60–90 years: 0.2–1.1 mg/dL >90 years: 0.2–0.9 mg/dL	2	70.0 mg/dL	CHEM CAL	8 hrs	60	30
Total Iron Binding Capacity (TIBC)	1.3	100	10.0	7	2–8°C	S	Yes	24.0	Sequential release and uptake of iron	EPA	658	40.0–670 µg/dL	250–425 µg/dL	---	---	SPCL CHEM CAL	7	180	7
Total Protein II (TP)	1.6	925	10.0	30	15–25°C	S;Li Hep P	Yes	17.5	Biuret	EPA	545	2.0–12.0 g/dL	5.7–8.2 g/dL	2	24.0 g/dL	CHEM CAL	2	181	30
Total Protein, CSF/Urine (UCFP)	1.1	185	5.0	30	2–8°C	Urine; CSF	Yes	6.3	Pyrogallol red-molybdate	EPA	596, 694	6.0–250.0 mg/dL	Urine: 1–14 mg/dL CSF: 15–45 mg/dL	10	6.0–2500 mg/dL	UCFP CAL	60	60	7

Assay (TDef name)	Test definition version	Test per well	Test Duration (min)	Reagent Onboard Stability (days)	Reagent Storage Temp	Sample Types	Reagent pack chimney	Sample Volume (µL)	Assay Reaction			Assay Ranges				Calibration			
									Assay Principle	Reaction Type	Wavelength (λ)	Assay Measuring Interval (Common Units)	Expected Values (Common Units)	Dilution Factor	Extended Range (Common Units)	Calibrator Name	Stability (days)**	Lot Calibration Interval (days)	Pack Calibration Interval (days)
Total Protein_2 (Upro)	1.4	200	10.0	30	15–25°C	Urine; CSF	Yes	13.3	Dye binding	EPA	596, 694	1.0–125.0 mg/dL	Urine: 24-hour: 1–14 mg/dL At rest: 50–80 mg/day After intense exercise < 250 mg/day CSF: 8–32 mg/dL	4	1.0–500.0 mg/dL	UPro CAL	21	60	30
Transferrin (Trf)	1.3	110	10.0	30	2–8°C	S;Li Hep P;K EDTA P	No	2.0	PEG-enhanced immunoturbidimetric	EPA	340, 596	1.0–440 mg/dL	Males Serum/Plasma 215–365 mg/dL Females Serum/Plasma 250–380 mg/dL	10	4400 mg/dL	LSP CAL	28	60	14
Triglycerides (Trig)	1.2	250	4.0	30	2–8°C	S;Li Hep P;K EDTA P	No	4.0	GPO	EPA	505, 694	10.0–550 mg/dL	Adult Serum Normal: < 150 mg/dL Borderline high: 150–199 mg/dL High: 200–499 mg/dL Very high: ≥ 500 mg/dL	2	1100 mg/dL	CHEM CAL	2	60	14
Urea Nitrogen (UN_c (serum/plasma))	1.8	780	7.0	30	2–8°C	S;Li Hep P	No	7.0	Urease with GLDH	RRA	340, 410	5.0–150 mg/dL	Adult 9–23 mg/dL	2	300 mg/dL	CHEM CAL	2	75	6
Urea Nitrogen (UN_c (urine))	1.8	780	7.0	30	2–8°C	Urine	No	7.0	Urease with GLDH	RRA	340, 410	35.0–1000 mg/dL	Adult 12–20 g/day	2	2000 mg/dL	CHEM CAL	2	75	6
Uric Acid (UA (serum))	1.3	600	7.0	30	2–8°C	S	No	11.0	Uricase/Peroxidase	EPA	545, 694	0.5–20 mg/dL	Male Serum/Plasma 3.7–9.2 mg/dL Female Serum/Plasma 3.1–7.8 mg/dL	5	100.0 mg/dL	CHEM CAL	2	183	7
Uric Acid (UA (urine))	1.3	600	7.0	30	2–8°C	Urine	No	11.0	Uricase/Peroxidase	EPA	545, 694	0.9–180 mg/dL	250–750 mg/day	2	360.0 mg/dL	CHEM CAL	2	183	7
Valproic Acid (VPA)	1.4	50	8.0	30 ^s	2–8°C	S;Li Hep P	No	2.5	PETINIA	EPA	545, 694	3.0–150.0 µg/mL	50–100 µg/mL	2	3.0–300.0 µg/mL	DRUG CAL II	30	30	7
Vancomycin (Vanc)	1.4	50	9.0	30 ^s	2–8°C	S;Li Hep P	No	2.5	PETINIA	EPA	545, 694	3.0–50.0 µg/mL	Peak 18–26 µg/mL Trough 5–10 µg/mL	2	3.0–100.0 µg/mL	DRUG CAL II	30	30	7
Wide-Range C-Reactive Protein (wrCRP) [OUS]	1.3	250	8.0	51	2–8°C	S;Li Hep P	No	10.0	Latex-enhanced immunoturbidimetric	EPA	571	0.05–15.60 mg/dL	0.00–0.50 mg/dL	4	0.05–62.40 mg/dL	wrCRP CAL	28	61	51
β2-Microglobulin (B2M)	1.3	100	8.0	30	2–8°C	S;Li Hep P;K EDTA P	No	5.0	Latex-enhanced immunoturbidimetric	EPA	545	0.25–18.00 mg/L	1.00–2.40 mg/L	5	90.00 mg/L	B2M CAL	30	60	21

Drugs of Abuse Technical Assay Summary

Assay [TDEF Name]	Abbreviation Product/Test Name	Tdef Version	Test per well	Test Duration (min)	Well Stability (days)	Sample Volume µL	Reaction Type	Wavelength (Å)	Assay Measuring Interval (Common Units)	Level 0††	Level 1	Level 2	Level 3	Level 4	Level 5	Drug Used	Lot Calibration Interval (days)	Pack Calibration Interval (days)
										10445406 (9A509UL)	10445407 (9A529UL)	10445408 (9A549UL)	10445409 (9A569UL)	10445410 (9A589UL)	10445411 (9A609UL)			
Amphetamines (Amp)	Amp300	1.3	190	7	30	13.5	RRA	340, 410	300 ng/mL Semiquantitative 100 - 1000 ng/mL	0	300	500	1000	---	---	D-Methamphetamine	60	20
Amphetamines (Amp)	Amp500	1.4	190	7	30	8.0	RRA	340, 410	500 ng/mL Semiquantitative 150 - 1800 ng/mL	0	300	500	1000	---	2000	D-Methamphetamine	60	20
Amphetamines (Amp)	Amp1K	1.4	190	7	30	5.0	RRA	340, 410	1000 ng/mL; Semiquantitative 150 - 1800 ng/mL	0	300	500	1000	---	2000	D-Methamphetamine	60	20
Barbiturates (Brb)	Brb200	1.3	190	7	30	17.5	RRA	340, 410	200 ng/mL; Semiquant 40 - 750 ng/mL	0	---	100	200	300	800	Secobarbital	60	30
Barbiturates (Brb)	Brb300	1.3	190	7	30	17.5	RRA	340, 410	300 ng/mL; Semiquant 40 - 750 ng/mL	0	---	100	200	300	800	Secobarbital	60	30
Benzodiazepines (Bnz)	Bnz200	1.3	190	7	30	17.5	RRA	340, 410	200 ng/mL; Semiquant 50-900 ng/mL	0	---	100	200	300	1000	Lormetazepam	60	20
Benzodiazepines (Bnz)	Bnz300	1.3	190	7	30	17.5	RRA	340, 410	300 ng/mL Semiquant 50-900 ng/mL	0	---	100	200	300	1000	Lormetazepam	60	20
Cannabinoids THC (Thc)	Thc 20	1.3	190	7	30	25.0	RRA	340, 410	20 ng/mL; Semiquant 10 - 55 ng/mL	0	---	20	50	100	---	11-nor- Δ9-THC-9-COOH	60	5
Cannabinoids THC (Thc)	Thc 50	1.3	190	7	30	13.0	RRA	340, 410	50 ng/mL; Semiquant 15 - 180 ng/mL	0	---	20	50	100	200	11-nor- Δ9-THC-9-COOH	60	5
Cannabinoids THC (Thc)	Thc 100	1.3	190	7	30	9.5	RRA	340, 410	100 ng/mL; Semiquant 15 - 180 ng/mL	0	---	---	50	100	200	11-nor- Δ9-THC-9-COOH	60	5
Cocaine Metabolite (Coc)	Coc150	1.5	190	7	30	25.0	RRA	340, 410	150 ng/mL; Semiquant 36-900 ng/mL	0	---	150	300	500	1000	Benzoyllecgonine	40	20
Cocaine Metabolite (Coc)	Coc300	1.5	190	7	30	25.0	RRA	340, 410	300 ng/mL; Semiquant 36-900 ng/mL	0	---	150	300	500	1000	Benzoyllecgonine	40	20
Methadone (Mdn150)	Mdn150	1.5	190	7	30	23.0	RRA	340, 410	150 ng/mL; Semiquant 40 - 450 ng/mL	0	---	150	300	500	---	Methadone	60	20
Methadone (Mdn300)	Mdn300	1.5	190	7	30	23.0	RRA	340, 410	300 ng/mL; Semiquant 40 - 450 ng/mL	0	---	150	300	500	---	Methadone	60	20

Assay availability is dependent on regulatory status in each country.

Footnotes begin on page 13.

Assay [TDEF Name]	Abbreviation Product/Test Name	Tdef Version	Test per well	Test Duration (min)	Well Stability (days)	Sample Volume μ L	Reaction Type	Wavelength (λ)	Assay Measuring Interval (Common Units)	Level 0††	Level 1	Level 2	Level 3	Level 4	Level 5	Drug Used	Lot Calibration Interval (days)	Pack Calibration Interval (days)
										10445406 (9A509UL)	10445407 (9A529UL)	10445408 (9A549UL)	10445409 (9A569UL)	10445410 (9A589UL)	10445411 (9A609UL)			
Opiates (Op)	Op300	1.3	190	7	30	24.0	RRA	340, 410	300 ng/mL; Semi-quant 75-1800 ng/mL	0	300	1000	2000	---	---	Morphine	60	30
Opiates (Op)	Op2000	1.3	190	7	30	6.0	RRA	340, 410	2000 ng/mL; Semi-quant 320-3800 ng/mL	0	---	1000	2000	---	4000	Morphine	60	30
Phencyclidine (Pcp25)	Pcp25	1.3	190	7	30	23.5	RRA	340, 410	25 ng/mL; Semi-quant 5 - 75 ng/mL	0	---	12.5	25	75	---	Phencyclidine	60	19

Assay [TDEF Name]	Abbreviation Product/Test Name	Tdef Version	Test per well	Test Duration (min)	Well Stability (days)	Sample Volume μ L	Reaction Type	Wavelength (λ)	Analytical Measuring Range (Common Units)	Level 0††	Level 1	Level 2	Level 3	Level 4	Level 5	Drug Used	Lot Calibration Interval (days)	Pack Calibration Interval (days)
										10445406 (9A509UL)	10470441 (9R529UL)	10470442 (9R549UL)	10470443 (9R569UL)	10470444 (9R589UL)	---			
Ecstasy (Xtc300)	Xtc300	1.5	50	7	30	23.0	RRA	340, 410	300 ng/mL; Semi-quant 75 – 500 ng/mL	0	150	300	500		---	methylenedioxymethamphetamine (MDMA)	60	15
Ecstasy (Xtc500)	Xtc500	1.6	50	7	30	16.0	RRA	340, 410	500 ng/mL; Semi-quant 75 – 1000 ng/mL	0	150	300	500	1000	---	methylenedioxymethamphetamine (MDMA)	60	15

Assay [TDEF Name]	Abbreviation Product/Test Name	Tdef Version	Test per well	Test Duration (min)	Well Stability (days)	Sample Volume μ L	Reaction Type	Wavelength (λ)	Analytical Measuring Range (Common Units)	Level 0††	Level 1	Level 2	Level 3	Level 4	Level 5	Drug Used	Lot Calibration Interval (days)	Pack Calibration Interval (days)
										---	11099437	---	---	---	---			
Methadone Metabolite EDDP (MetMtb)	MetMtb	1.3	250	7	30	25.0	RRA	340, 410	1000 ng/mL	---	1000	---	---	---	---	2-ethylidene-1,5-dimethyl-3,3-diphenylpyrrolidine (EDDP)	60	14

Assay [TDEF Name]	Abbreviation Product/Test Name	Tdef Version	Test per well	Test Duration (min)	Well Stability (days)	Sample Volume μ L	Reaction Type	Wavelength (λ)	Assay Measuring Interval (Common Units)	Level 0 ^{††}	Level 1	Level 2	Level 3	Level 4	Level 5	Drug Used	Lot Calibration Interval (days)	Pack Calibration Interval (days)
										10445406 (9A509UL)	10720807 (9T529UL)	10720813 (9T549UL)	10720814 (9T569UL)	10720815 (9T589UL)	---			
Oxycodone (OXY)	OXY100	1.2	190	7	40	12.0	RRA	340	100 ng/mL, Semi-quantitative 50 - 400 ng/mL	0	100	300	500	---	---	Oxycodone	62	28
Oxycodone (OXY)	OXY300	1.2	190	7	40	4.0	RRA	340	300 ng/mL, Semi-quantitative 75 - 1000 ng/mL	0	100	300	500	1000	---	Oxycodone	62	28

Trademark Information

Atellica is a trademark of Siemens Healthineers.

All other trademarks and brands are the property of their respective owners.

Footnotes

- * Dilution factor refers to dilutions that extend the upper limit of the measuring interval.
See assay instructions for use for dilution factors that extend below the lower limit of the measuring interval.
- ** Stability of opened or reconstituted calibrator. For stability of calibrators stored onboard the Sample Handler, refer to 11111053 Atellica Sample Handler Calibrator and QC Storage and Stability.
- † Requires manual preparation. See assay instructions for use.
- †† All measurements are in ng/mL unless otherwise listed.
- ‡ The level number assigned in the calibrator definition in comparison to the printed level on the barcode labels may differ. Refer to the color-coded information for clarification.
- | | | | | |
|---------|---------|---------|---------|---------|
| Level 1 | Level 2 | Level 3 | Level 4 | Level 5 |
|---------|---------|---------|---------|---------|
- § In the event that only 1 well is used, the pack and well information is identical.

Notes

All assays may not be available. Contact the local technical support provider for availability.

To identify the acceptability of the calibration curve, determine the status of the calibration, and, if valid, compare the observed control values to expected values. If controls are out of range, repeat with fresh QC, perform routine cleaning, prepare fresh reagents, calibrators, and controls, and recalibrate the assays. The information in the printed customer documentation was correct at the time of issue.

Siemens Healthineers continues to improve products and reserves the right to change specifications, equipment, and maintenance procedures at any time without notice. For current information, see the assay instruction for use available at www.siemens-healthineers.com.