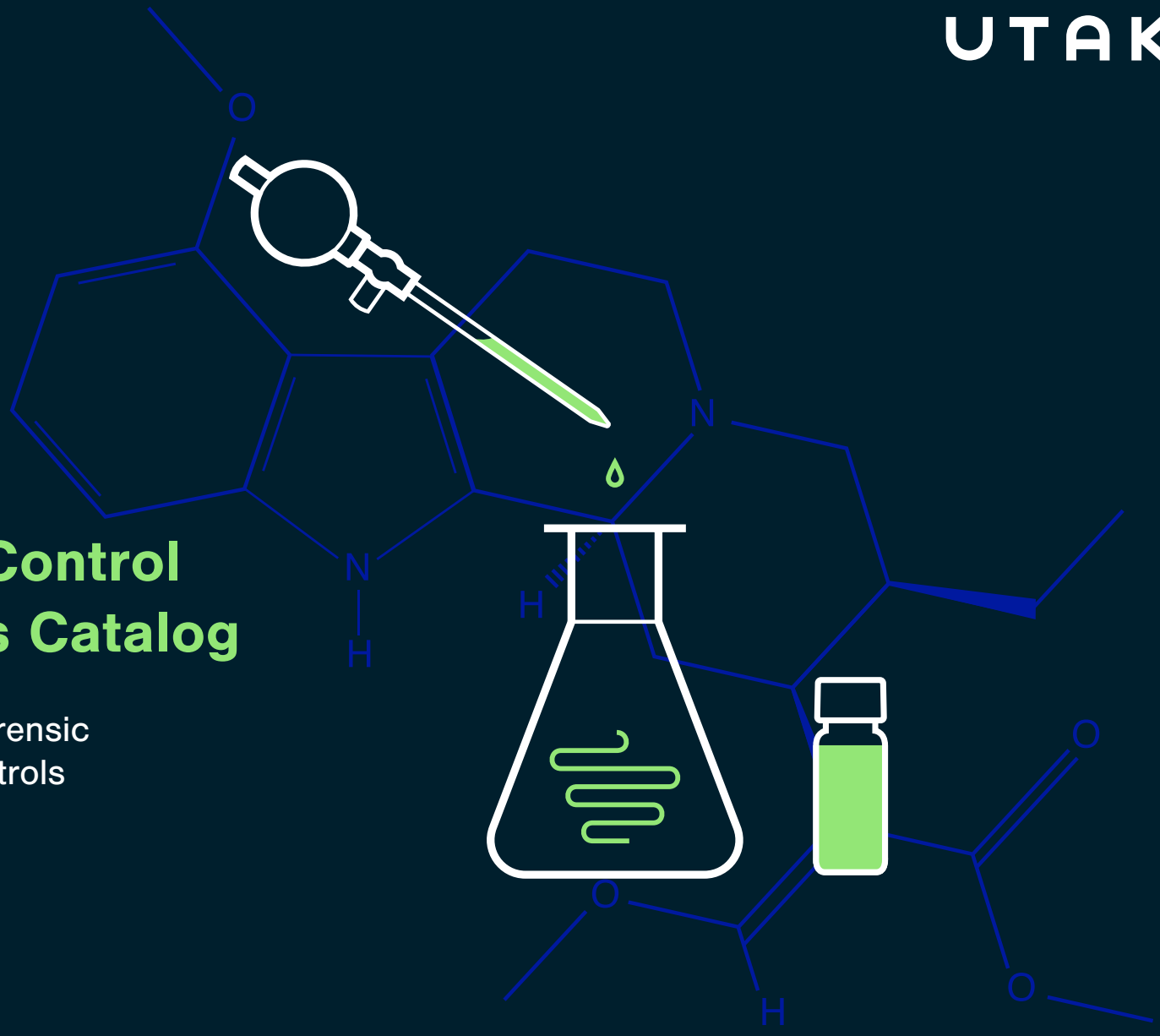
UTAK

Quality Control Products Catalog

Clinical and forensic toxicology controls



PRODUCT CATALOG 2019

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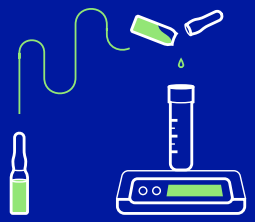
A different kind of control freak

UTAK manufactures a wide variety of stock controls for Drugs of Abuse, Therapeutic Drug Monitoring and esoteric toxicology analysis, using meticulously sourced 100% human matrices and the purest drugs possible, for labs around the world. We've also earned a reputation for personalized controls, created in small batches to fit the specific needs of customers. Our secret ingredient is our passion for control—driven by our mission to create control, one sample, one test, one life at a time.

Because every result matters when you're a control freak.



About UTAK

UTAK was founded in 1973 by Larry Plutchak, a chemist in the LA Coroner's office. Frustrated by the difficulty in verifying the calibrations of the lab's analytical instruments, Larry founded UTAK with his wife Judy, in order to give toxicology labs access to the control materials they needed. Under the leadership of Larry's son Jim Plutchak, UTAK has perfected the practice of using flexible manufacturing practices to create unmatched control materials, and remains committed to Larry's mission of bringing greater control to toxicology.

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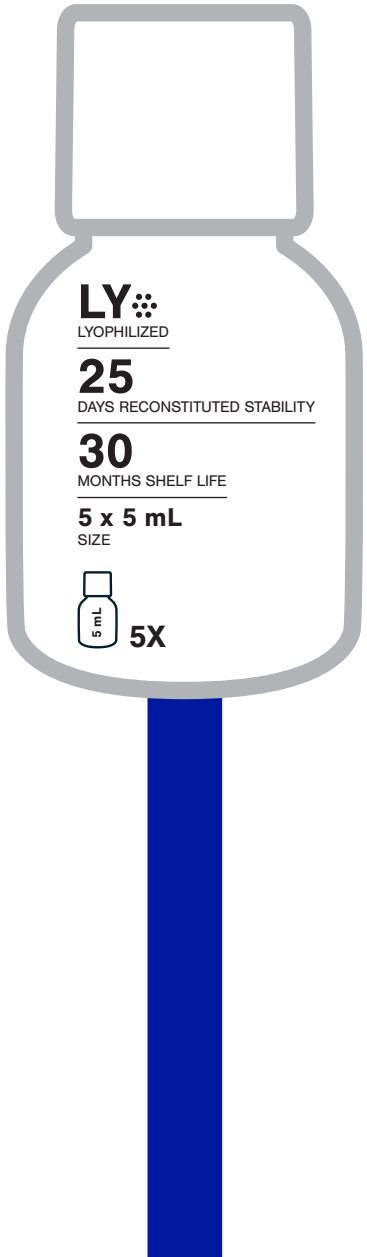
Serum

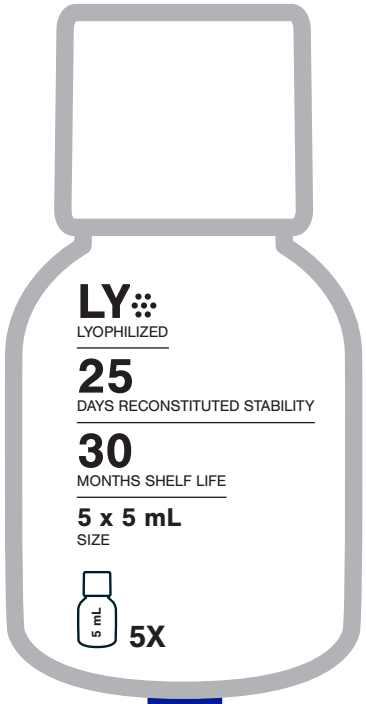


Serum Controls

AED II MR

REF 72741

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
Felbamate	25	50 µg/mL
Gabapentin	25	10 µg/mL
Lacosamide	25	5 µg/mL
Lamotrigine	25	5 µg/mL
Levetiracetam	25	15 µg/mL
Oxcarbazepine	25	2 µg/mL
10-OH-Carbazepine	25	20 µg/mL
Pregabalin	25	5 µg/mL
Rufinamide	25	5 µg/mL
Tiagabine	25	80 µg/mL
Topiramate	25	15 µg/mL
Zonisamide	25	20 µg/mL

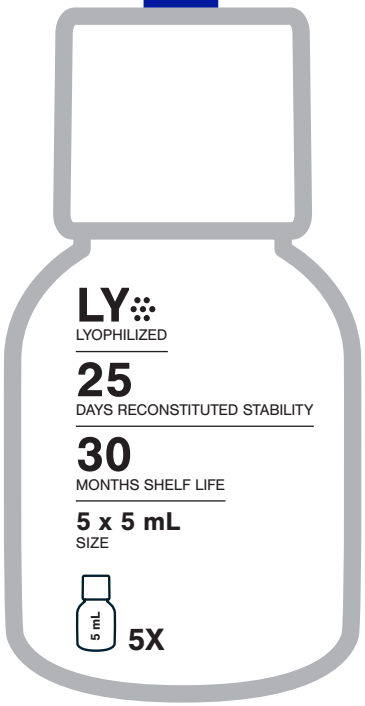


Serum Controls

AED II HR

REF 72740

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
Felbamate	25	100 µg/mL
Gabapentin	25	40 µg/mL
Lacosamide	25	20 µg/mL
Lamotrigine	25	20 µg/mL
Levetiracetam	25	40 µg/mL
Oxcarbazepine	25	10 µg/mL
10-OH-Carbazepine	25	60 µg/mL
Pregabalin	25	15 µg/mL
Rufinamide	25	40 µg/mL
Tiagabine	25	140 µg/mL
Topiramate	25	50 µg/mL
Zonisamide	25	60 µg/mL



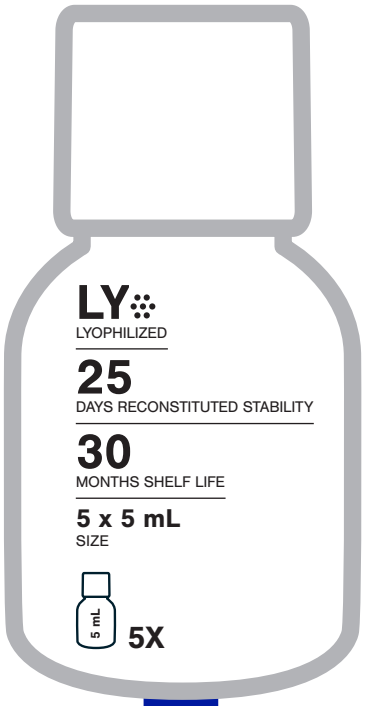
Serum Controls

Antifungals Level 1

REF 43010

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
Fluconazole	25	4 µg/mL
Itraconazole	25	1.5 µg/mL
Hydroxy-Itraconazole*	25	1.5 µg/mL
Posaconazole	25	1.5 µg/mL
Voriconazole	25	1.5 µg/mL
5-Flucytosine	25	30 µg/mL
Caspofungin	25	1.5 µg/mL

** Hydroxy-Itraconazole is weighed and spiked into this control material, but no claim is made for expected values or stability.*



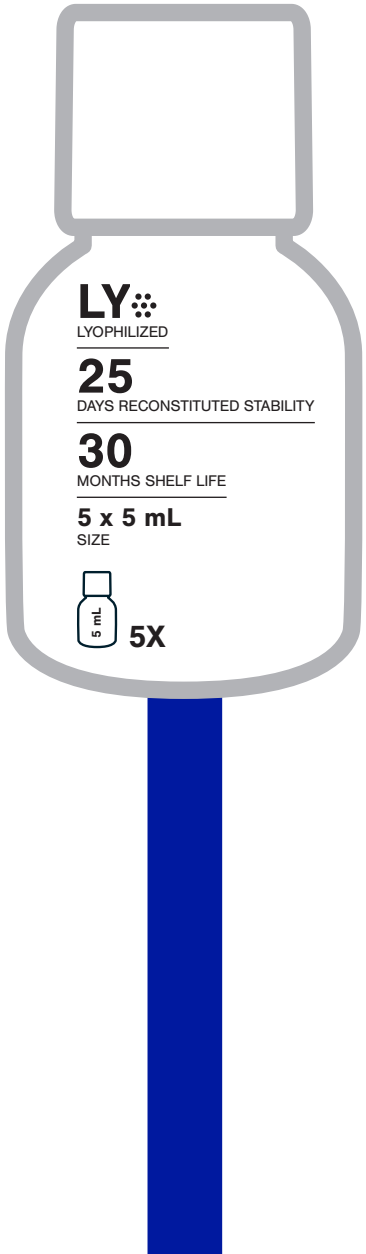
Serum Controls

Antifungals Level 2

REF 43011

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
Fluconazole	25	20 µg/mL
Itraconazole	25	5 µg/mL
Hydroxy-Itraconazole*	25	5 µg/mL
Posaconazole	25	5 µg/mL
Voriconazole	25	5 µg/mL
5-Flucytosine	25	65 µg/mL
Caspofungin	25	9 µg/mL

** Hydroxy-Itraconazole is weighed and spiked into this control material, but no claim is made for expected values or stability.*

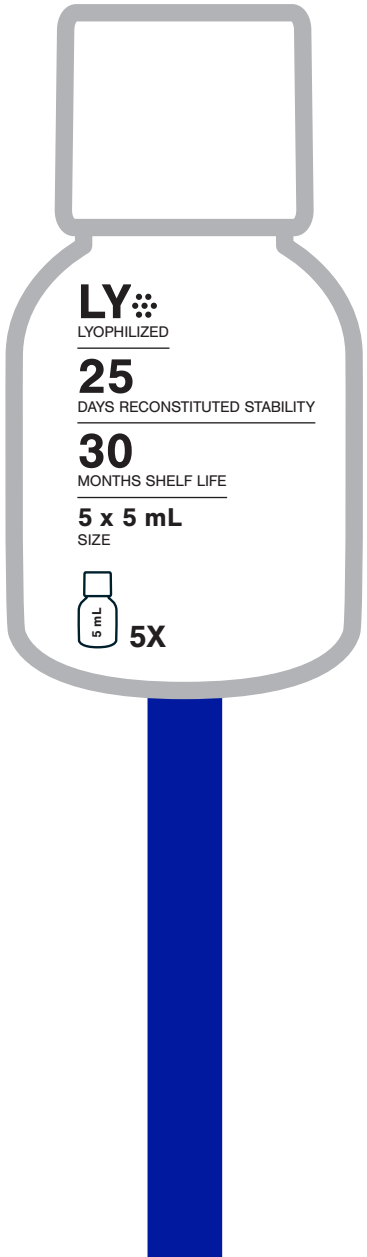


Serum Controls

Antipsychotics 1 MR

REF 57045

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
Aripiprazole	25	100 ng/mL
Clozapine	25	100 ng/mL
Desmethylclozapine	25	100 ng/mL
Haloperidol	25	10 ng/mL
Reduced Haloperidol	25	10 ng/mL
Olanzapine	25	50 ng/mL
Quetiapine	25	100 ng/mL
Risperidone	25	50 ng/mL
9-Hydroxyrisperidone	25	50 ng/mL
Ziprasidone	25	50 ng/mL

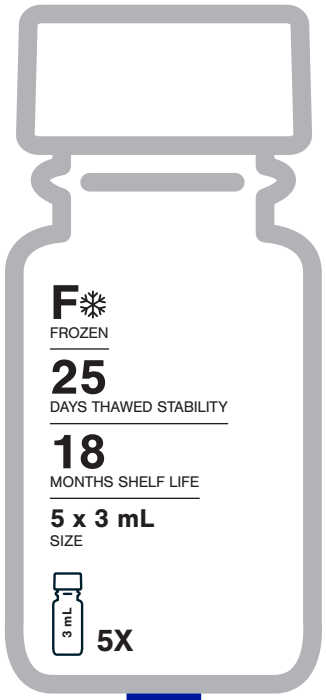


Serum Controls

Antipsychotics 1 HR

REF 57044

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
Aripiprazole	25	400 ng/mL
Clozapine	25	400 ng/mL
Desmethylclozapine	25	400 ng/mL
Haloperidol	25	50 ng/mL
Reduced Haloperidol	25	50 ng/mL
Olanzapine	25	100 ng/mL
Quetiapine	25	400 ng/mL
Risperidone	25	150 ng/mL
9-Hydroxyrisperidone	25	150 ng/mL
Ziprasidone	25	150 ng/mL

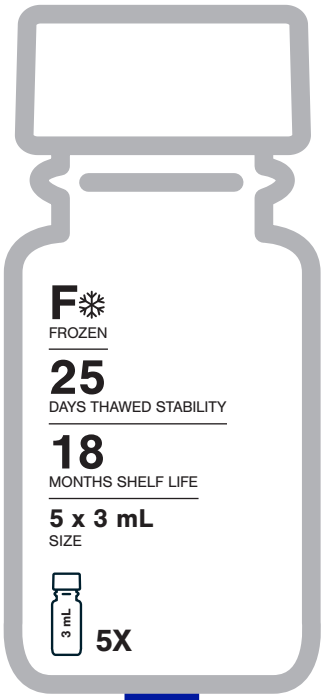


Serum Controls

DHEA Plus Low

REF 51410

Analyte	Stability	Gravimetrically Weighed Value	
	(Days)		Units
Androstenedione	25	1.5	ng/mL
Hydrocortisone (Cortisol)	25	6.0	µg/dL
Cortisone	25	1.5	µg/dL
Corticosterone	25	300	ng/dL
11-Deoxycortisol	25	100	ng/dL
Dehydroepiandrosterone (DHEA)	25	3	ng/mL
Progesterone	25	7.5	ng/mL
17α-Hydroxyprogesterone	25	300	ng/dL
Testosterone	25	300	ng/dL

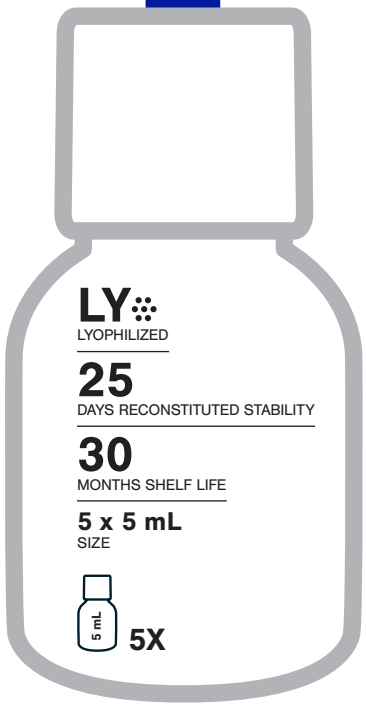


Serum Controls

DHEA Plus High

REF 51411

Analyte	Stability	Gravimetrically Weighed Value	
	(Days)		Units
Androstenedione	25	4	ng/mL
Hydrocortisone (Cortisol)	25	20	µg/dL
Cortisone	25	4	µg/dL
Corticosterone	25	800	ng/dL
11-Deoxycortisol	25	300	ng/dL
Dehydroepiandrosterone (DHEA)	25	8	ng/mL
Progesterone	25	20	ng/mL
17α-Hydroxyprogesterone	25	800	ng/dL
Testosterone	25	800	ng/dL

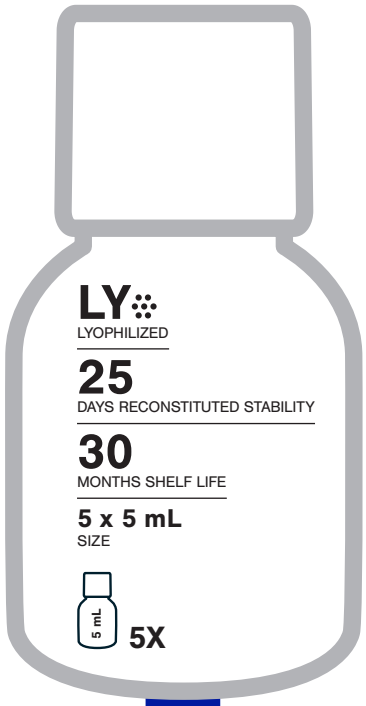


Serum Controls

Methotrexate Level 1

REF 12103

Analyte	Stability	Gravimetrically Weighed Value	
	(Days)		Units
Methotrexate	25	0.050	µmol/L

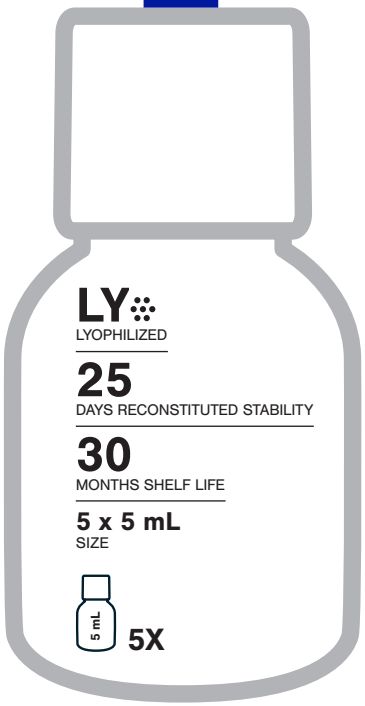


Serum Controls

Methotrexate Level 2

REF 12104

Analyte	Stability	Gravimetrically Weighed Value	
	(Days)		Units
Methotrexate	25	0.075	µmol/L

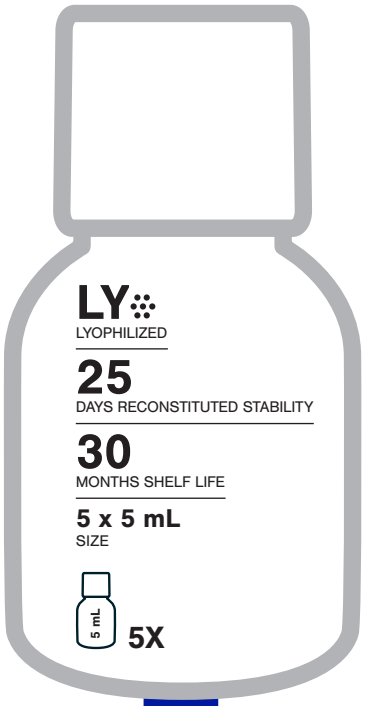


Serum Controls

Methotrexate Level 3

REF 12105

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
Methotrexate	25	0.5 µmol/L

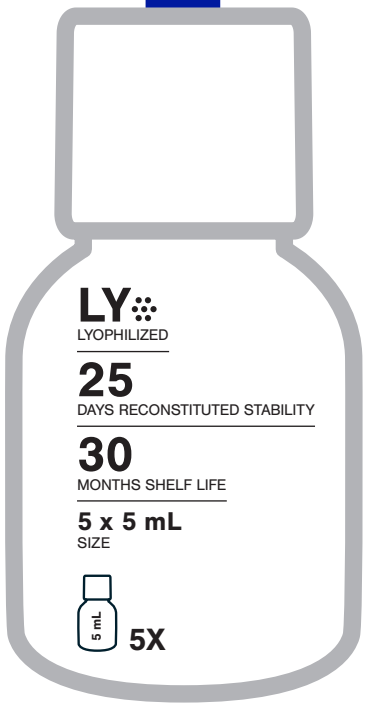


Serum Controls

Methotrexate Level 4

REF 12106

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
Methotrexate	25	0.75 µmol/L

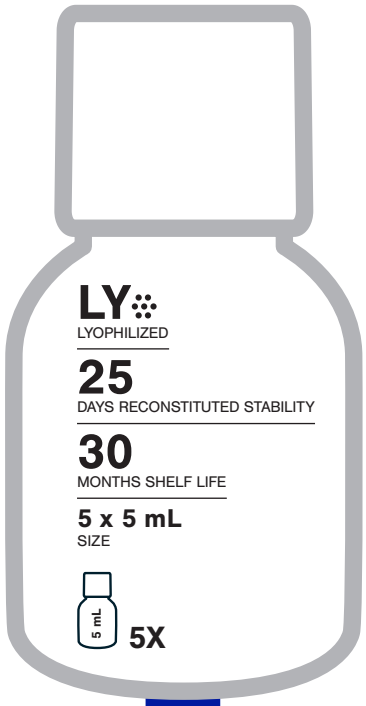


Serum Controls

MMA Level 1

REF 74053

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
Methylmalonic Acid (MMA)	25	0.2 µmol/L

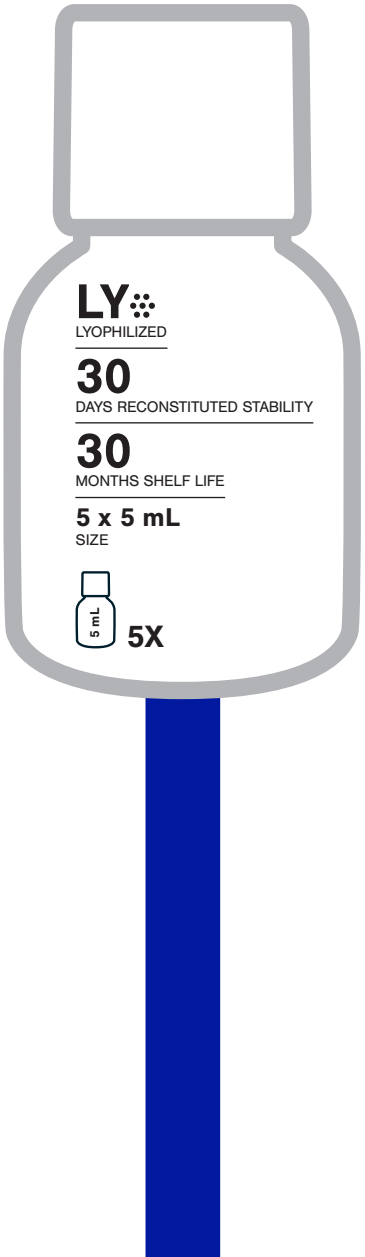


Serum Controls

MMA Level 2

REF 74054

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
Methylmalonic Acid (MMA)	25	1.0 µmol/L

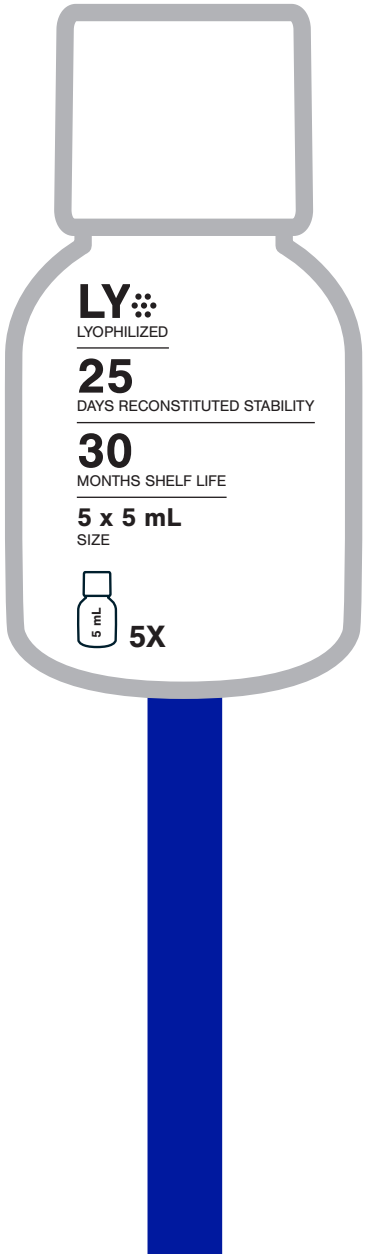


Serum Controls

Pentobarbital

REF 66319

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
Pentobarbital	30	20 µg/mL



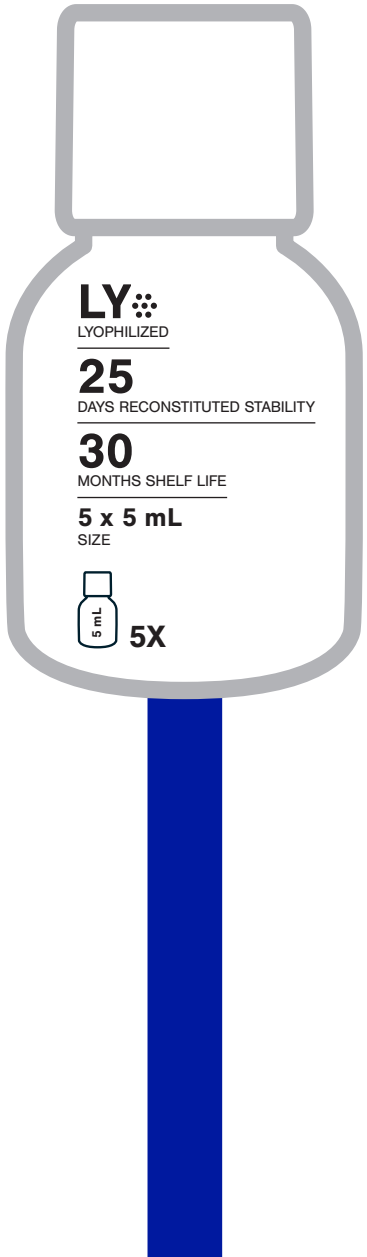
Serum Controls

SSRI 7 Plus MR

REF 57041

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
Bupropion	*	70 ng/mL
Citalopram	25	70 ng/mL
Duloxetine	25	150 ng/mL
Fluoxetine	25	150 ng/mL
Norfluoxetine	25	150 ng/mL
Fluvoxamine	25	100 ng/mL
Paroxetine	25	100 ng/mL
Sertraline	25	100 ng/mL
Desmethylsertraline	25	100 ng/mL
Venlafaxine	25	100 ng/mL
Desmethylvenlafaxine	25	100 ng/mL

** Bupropion is weighed and spiked into this control material, but no claim is made for expected values or stability*



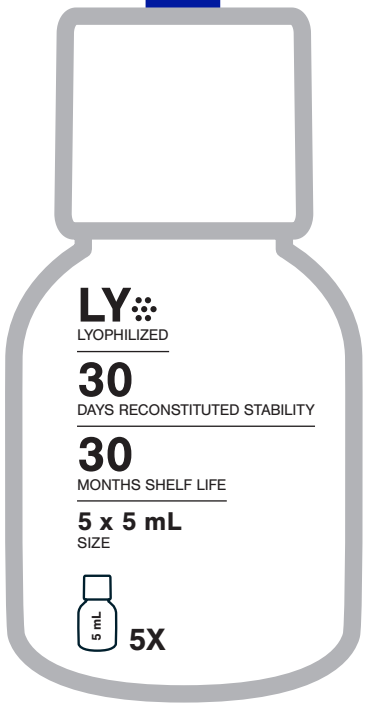
Serum Controls

SSRI 7 Plus HR

REF 57040

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
Bupropion	*	150 ng/mL
Citalopram	25	150 ng/mL
Duloxetine	25	600 ng/mL
Fluoxetine	25	600 ng/mL
Norfluoxetine	25	600 ng/mL
Fluvoxamine	25	1000 ng/mL
Paroxetine	25	300 ng/mL
Sertraline	25	300 ng/mL
Desmethylsertraline	25	300 ng/mL
Venlafaxine	25	500 ng/mL
Desmethylvenlafaxine	25	500 ng/mL

** Bupropion is weighed and spiked into this control material, but no claim is made for expected values or stability*

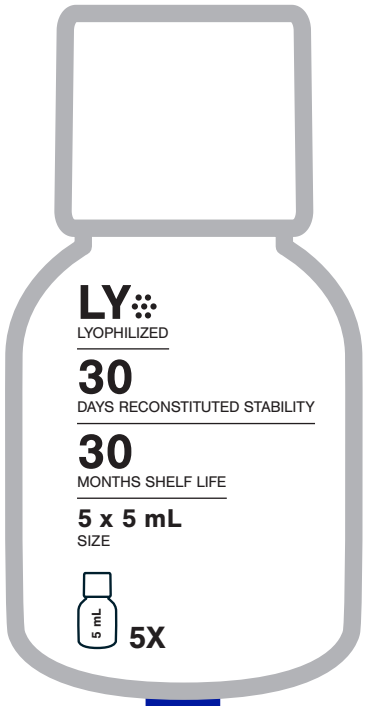


Serum Controls

STABBS Negative

REF 44511

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
Amitriptyline	30	120 ng/mL
Diazepam	30	0.1 µg/mL
Secobarbital	30	0.9 µg/mL

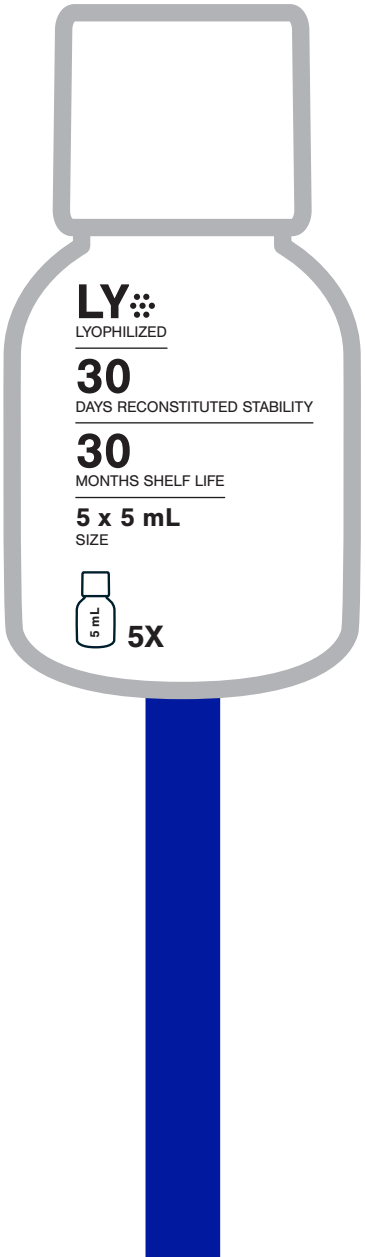


Serum Controls

STABBS Positive

REF 44510

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
Amitriptyline	30	480 ng/mL
Diazepam	30	0.38 µg/mL
Secobarbital	30	3.6 µg/mL

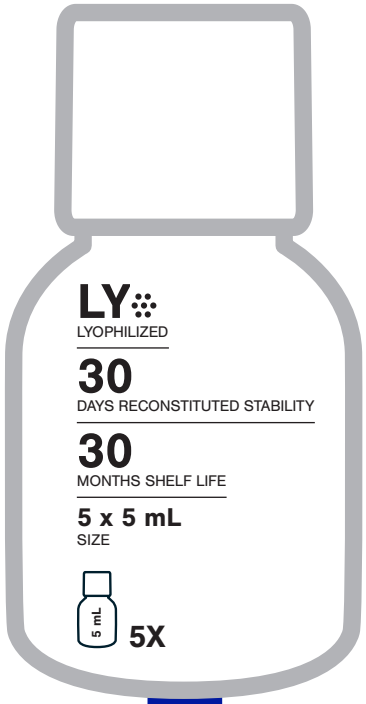


Serum Controls

NR Trace Elements

REF 66816

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	
Aluminum	30	
Cadmium	30	
Calcium	30	
Chromium	30	**Values approximate**
Copper	30	**Adult Normal**
Iron	30	**Range**
Magnesium	30	
Manganese	30	
Nickel	30	
Selenium	30	
Silver	30	
Zinc	30	

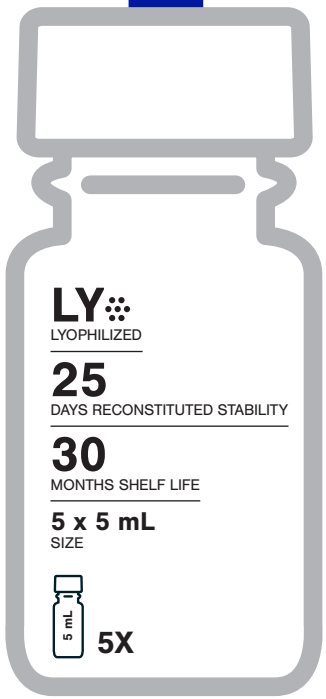


Serum Controls

HR Trace Elements

REF **66815**

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	
Aluminum	30	
Cadmium	30	
Calcium	30	
Chromium	30	**Values approximate**
Copper	30	**Adult High / Toxic**
Iron	30	**Range**
Magnesium	30	
Manganese	30	
Nickel	30	
Selenium	30	
Silver	30	
Zinc	30	

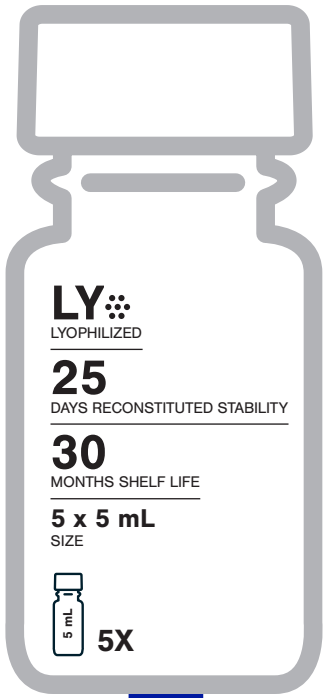


Serum Controls

Vitamin A Plus E Low

REF 10081

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
Retinol (Vitamin A)	25	450 ng/mL
Retinyl Palmitate (Vitamin A)	25	50 ng/mL
α-Tocopherol (Vitamin E)	25	6 µg/mL
γ-Tocopherol (Vitamin E)	25	2 µg/mL

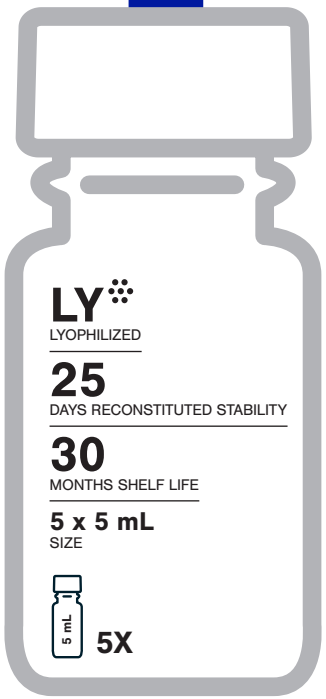


Serum Controls

Vitamin A Plus E High

REF 10082

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
Retinol (Vitamin A)	25	1500 ng/mL
Retinyl Palmitate (Vitamin A)	25	150 ng/mL
α-Tocopherol (Vitamin E)	25	30 µg/mL
γ-Tocopherol (Vitamin E)	25	4.5 µg/mL

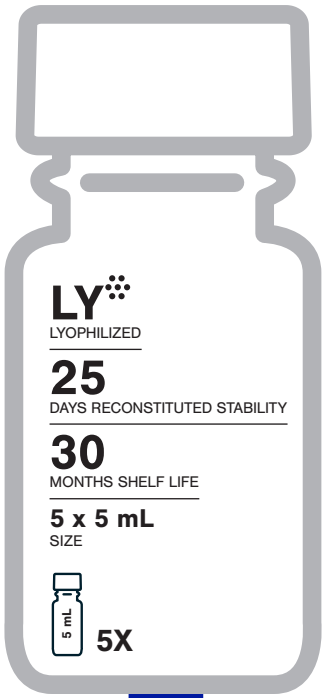


Serum Controls

Vitamin D Plus Low

REF 10060

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
25-Hydroxy Vitamin D2 (25-OH-D2)	25	10 ng/mL
25-Hydroxy Vitamin D3 (25-OH-D3)	25	10 ng/mL

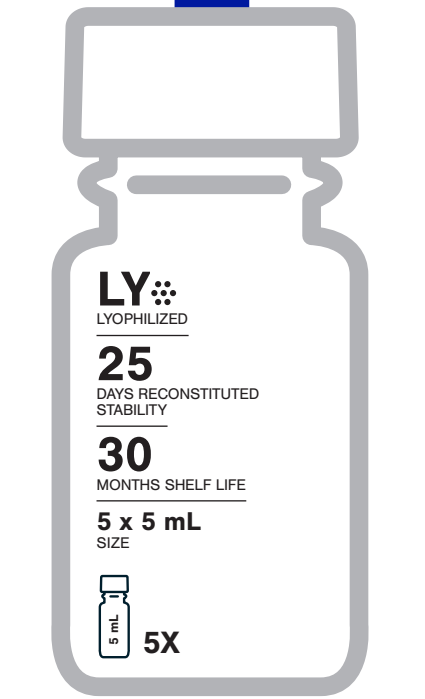


Serum Controls

Vitamin D Plus Level 1

REF 10061

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
25-Hydroxy Vitamin D2 (25-OH-D2)	25	30 ng/mL
25-Hydroxy Vitamin D3 (25-OH-D3)	25	30 ng/mL

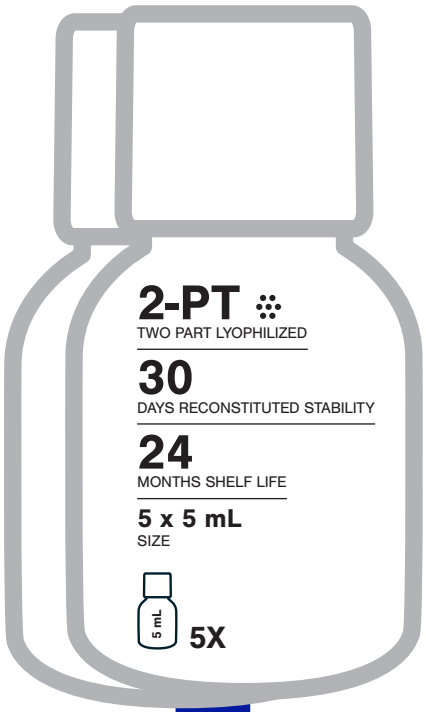


Serum Controls

Vitamin D Plus Level 2

REF 10062

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
25-Hydroxy Vitamin D2 (25-OH-D2)	25	73 ng/mL
25-Hydroxy Vitamin D3 (25-OH-D3)	25	73 ng/mL

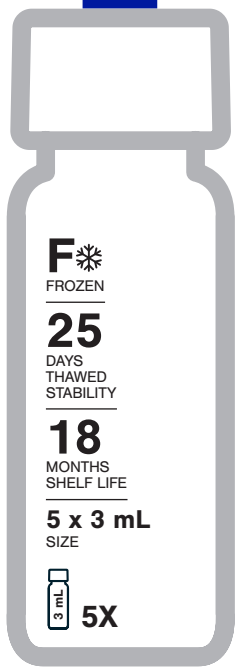


Serum Controls

Volatiles

REF 88119

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
Acetone	30	80 mg/dL
Ethanol	30	150 mg/dL
Ethylene Glycol	30	80 mg/dL
Isopropanol	30	80 mg/dL
Methanol	30	40 mg/dL

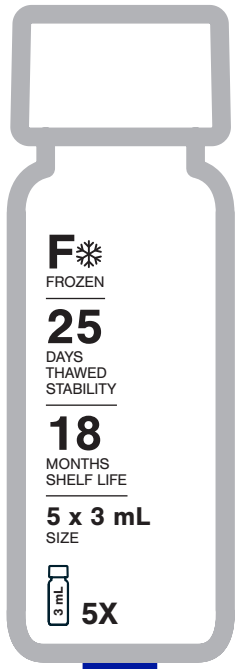


SMx Serum Controls

Steroids Level 1

REF 51401

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
Androstenedione	25	0.5 ng/mL
Hydrocortisone (Cortisol)	25	2.5 µg/dL
Cortisone	25	0.6 µg/dL
Corticosterone	25	100 ng/dL
11-Deoxycortisol	25	40 ng/dL
Dehydroepiandrosterone (DHEA)	25	1.0 ng/mL
Progesterone	25	2.5 ng/mL
17α-Hydroxyprogesterone	25	100 ng/dL
Testosterone	25	100 ng/dL

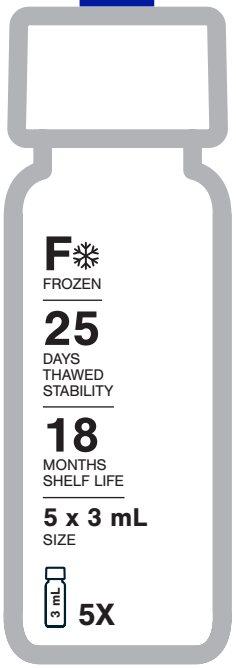


SMx Serum Controls

Steroids Level 2

REF 51402

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
Androstenedione	25	1.0 ng/mL
Hydrocortisone (Cortisol)	25	5.0 µg/dL
Cortisone	25	1.2 µg/dL
Corticosterone	25	200 ng/dL
11-Deoxycortisol	25	80 ng/dL
Dehydroepiandrosterone (DHEA)	25	2.0 ng/mL
Progesterone	25	5.0 ng/mL
17α-Hydroxyprogesterone	25	200 ng/dL
Testosterone	25	200 ng/dL

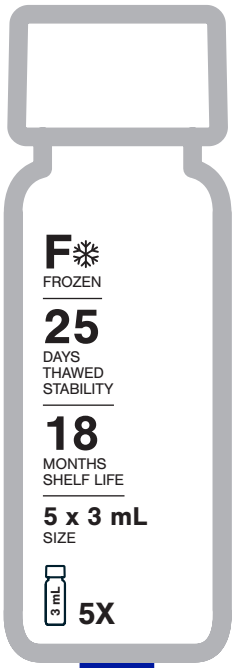


SMx Serum Controls

Steroids Level 3

REF 51403

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
Androstenedione	25	2.5 ng/mL
Hydrocortisone (Cortisol)	25	12.5 µg/dL
Cortisone	25	3 µg/dL
Corticosterone	25	500 ng/dL
11-Deoxycortisol	25	200 ng/dL
Dehydroepiandrosterone (DHEA)	25	5 ng/mL
Progesterone	25	12.5 ng/mL
17α-Hydroxyprogesterone	25	500 ng/dL
Testosterone	25	500 ng/dL

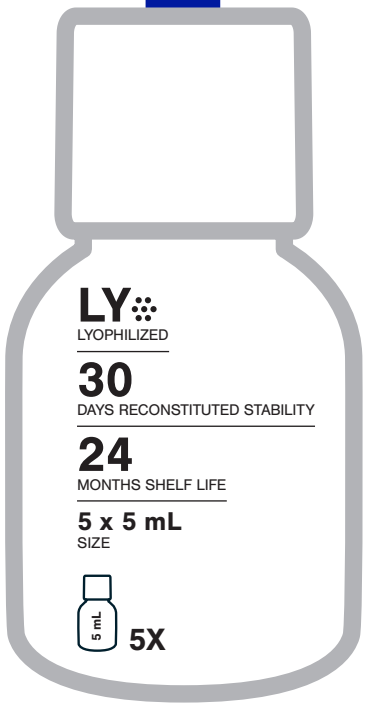


SMx Serum Controls

Steroids Level 4

REF 51404

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
Androstenedione	25	5 ng/mL
Hydrocortisone (Cortisol)	25	25 µg/dL
Cortisone	25	6 µg/dL
Corticosterone	25	1000 ng/dL
11-Deoxycortisol	25	400 ng/dL
Dehydroepiandrosterone (DHEA)	25	10 ng/mL
Progesterone	25	25 ng/mL
17α-Hydroxyprogesterone	25	1000 ng/dL
Testosterone	25	1000 ng/dL

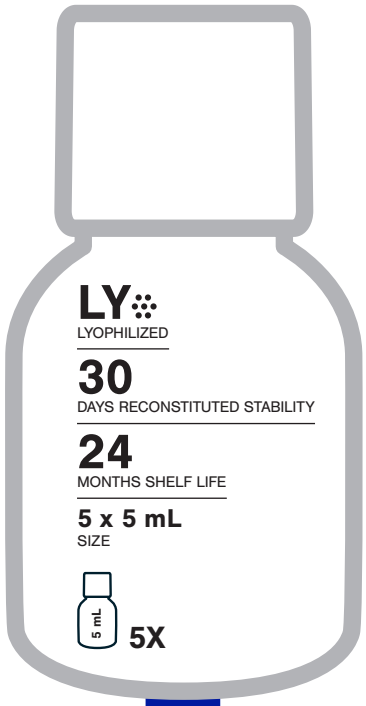


Serum Controls

Mid Range Tricyclic Antidepressants VI

REF 66317

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
Amitriptyline	30	100 ng/mL
Doxepin	30	100 ng/mL
N-Desmethyldoxepin	30	100 ng/mL
Imipramine	30	100 ng/mL
Desipramine	30	100 ng/mL
Nortriptyline	30	100 ng/mL



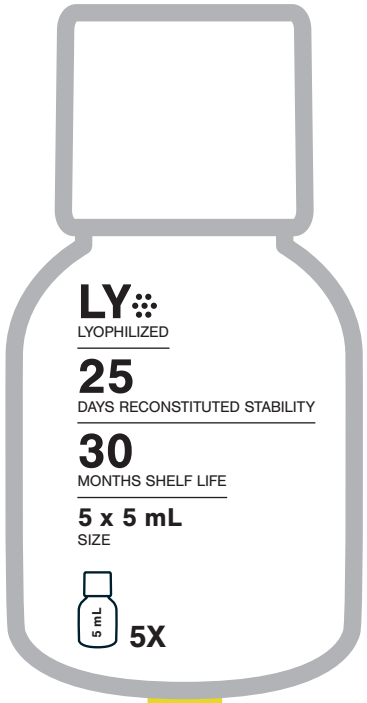
Serum Controls

High Range Tricyclic Antidepressants VI

REF 66316

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
Amitriptyline	25	400 ng/mL
Doxepin	25	400 ng/mL
N-Desmethyldoxepin	25	400 ng/mL
Imipramine	25	400 ng/mL
Desipramine	25	400 ng/mL
Nortriptyline	25	400 ng/mL

Urine Controls

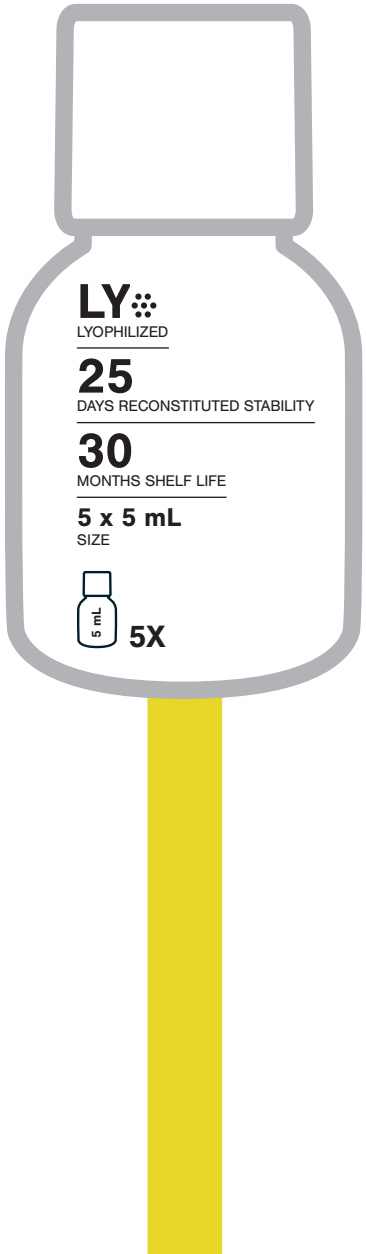


Urine Controls

Amphetamines Panel Level 1

REF 41400

Analyte	Stability	Gravimetrically Weighed Value	
	(Days)		Units
d-Amphetamine	25	350	ng/mL
(±)-3,4-Methylenedioxyamphetamine (MDA)	25	350	ng/mL
d-Methamphetamine	25	350	ng/mL
(±)-3,4-Methylenedioxymethamphetamine (MDMA)	25	350	ng/mL
(±)-3,4-Methylenedioxyethylamphetamine (MDEA)	25	350	ng/mL
Methylephedrine	25	350	ng/mL
(-)-Ephedrine	25	350	ng/mL
Phendimetrazine	25	350	ng/mL
Phenmetrazine	25	350	ng/mL
Phentermine	25	350	ng/mL
Phenylpropanolamine	25	350	ng/mL
(+)-Pseudoephedrine	25	350	ng/mL
Selegiline	25	350	ng/mL

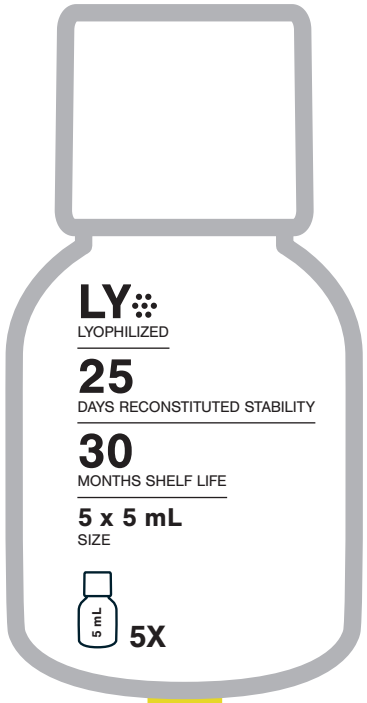


Urine Controls

Amphetamines Panel Level 2

REF 41401

Analyte	Stability	Gravimetrically Weighed Value	
	(Days)		Units
d-Amphetamine	25	700	ng/mL
(±)-3,4-Methylenedioxyamphetamine (MDA)	25	700	ng/mL
d-Methamphetamine	25	700	ng/mL
(±)-3,4-Methylenedioxymethamphetamine (MDMA)	25	700	ng/mL
(±)-3,4-Methylenedioxyethylamphetamine (MDEA)	25	700	ng/mL
Methylephedrine	25	700	ng/mL
(-)-Ephedrine	25	700	ng/mL
Phendimetrazine	25	700	ng/mL
Phenmetrazine	25	700	ng/mL
Phentermine	25	700	ng/mL
Phenylpropanolamine	25	700	ng/mL
(+)-Pseudoephedrine	25	700	ng/mL
Selegiline	25	700	ng/mL



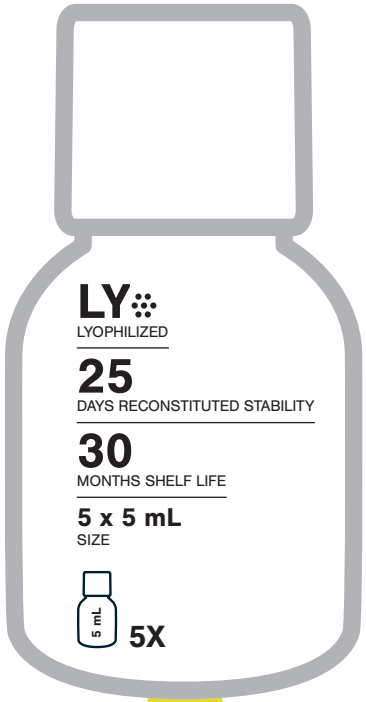
Urine Controls

Benzodiazepines Plus 100 ng/mL

REF 12090

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
Alprazolam	25	100 ng/mL
α-Hydroxyalprazolam	25	100 ng/mL
Chlordiazepoxide	25	100 ng/mL
Norchlordiazepoxide	25	100 ng/mL
Clobazam	25	100 ng/mL
Clonazepam	25	100 ng/mL
7-Aminoclonazepam	*	100 ng/mL
Diazepam	25	100 ng/mL
Nordiazepam	25	100 ng/mL
Estazolam	25	100 ng/mL
Flunitrazepam	25	100 ng/mL
7-Aminoflunitrazepam	*	100 ng/mL
Flurazepam	25	100 ng/mL
Desalkylflurazepam	25	100 ng/mL
Hydroxyethylflurazepam	25	100 ng/mL
Lorazepam	25	100 ng/mL
Midazolam	25	100 ng/mL
α-Hydroxymidazolam	25	100 ng/mL
Nitrazepam	25	100 ng/mL
7-Aminonitrazepam	*	100 ng/mL
Oxazepam	25	100 ng/mL
Temazepam	25	100 ng/mL
Triazolam	25	100 ng/mL
α-Hydroxytriazolam	25	100 ng/mL
Zolpidem	25	100 ng/mL

** 7-Amino metabolites are weighed and spiked into this control material, but no claim is made for expected values or stability.*



Urine Controls

Benzodiazepines Plus 400 ng/mL

REF 12091

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
Alprazolam	25	400 ng/mL
α-Hydroxyalprazolam	25	400 ng/mL
Chlordiazepoxide	25	400 ng/mL
Norchlordiazepoxide	25	400 ng/mL
Clobazam	25	400 ng/mL
Clonazepam	25	400 ng/mL
7-Aminoclonazepam	*	400 ng/mL
Diazepam	25	400 ng/mL
Nordiazepam	25	400 ng/mL
Estazolam	25	400 ng/mL
Flunitrazepam	25	400 ng/mL
7-Aminoflunitrazepam	*	400 ng/mL
Flurazepam	25	400 ng/mL
Desalkylflurazepam	25	400 ng/mL
Hydroxyethylflurazepam	25	400 ng/mL
Lorazepam	25	400 ng/mL
Midazolam	25	400 ng/mL
α-Hydroxymidazolam	25	400 ng/mL
Nitrazepam	25	400 ng/mL
7-Aminonitrazepam	*	400 ng/mL
Oxazepam	25	400 ng/mL
Temazepam	25	400 ng/mL
Triazolam	25	400 ng/mL
α-Hydroxytriazolam	25	400 ng/mL
Zolpidem	25	400 ng/mL

** 7-Amino metabolites are weighed and spiked into this control material, but no claim is made for expected values or stability.*

Urine Controls

DAU Low Cutoff 1

REF 50702

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
α-Hydroxyalprazolam	25	150 ng/mL
Amobarbital	25	150 ng/mL
d-Amphetamine	25	187.5 ng/mL
(±)-3,4-Methylenedioxyamphetamine (MDA)	25	187.5 ng/mL
d-Methamphetamine	25	187.5 ng/mL
(±)-3,4-Methylenedioxymethamphetamine (MDMA)	25	187.5 ng/mL
(±)-3,4-Methylenedioxyethylamphetamine (MDEA)	25	187.5 ng/mL
Benzoylecgonine (BE)	25	75 ng/mL
Butalbital	25	150 ng/mL
Codeine	25	225 ng/mL
Nordiazepam	25	150 ng/mL
Hydrocodone	25	75 ng/mL
Hydromorphone	25	75 ng/mL
Lorazepam	25	150 ng/mL
Methadone	25	150 ng/mL
Methadone Primary Metabolite (EDDP)	25	150 ng/mL
Methaqualone	25	150 ng/mL
Morphine-3-β-D-Glucuronide	25	365* ng/mL
6-Monoacetylmorphine (6-MAM)	25	7.5 ng/mL
Nortriptyline	25	150 ng/mL
Oxazepam	25	150 ng/mL
Oxycodone	25	37.5 ng/mL
Oxymorphone	25	37.5 ng/mL
Pentobarbital	25	150 ng/mL
Phencyclidine (PCP)	25	18.75 ng/mL
Phenobarbital	25	150 ng/mL
Norpropoxyphene	25	150 ng/mL
Secobarbital	25	150 ng/mL
Temazepam	25	150 ng/mL
(l)-9-Carboxy-11-nor-Delta-9-THC (THC-COOH)	25	11.25 ng/mL

** Equivalent to 225 ng/mL of free Morphine.*

Urine Controls

DAU Low Cutoff 2

REF 50703

Analyte	Stability	Gravimetrically Weighed Value	
	(Days)		Units
α-Hydroxyalprazolam	25	250	ng/mL
Amobarbital	25	250	ng/mL
d-Amphetamine	25	312.5	ng/mL
(±)-3,4-Methylenedioxyamphetamine (MDA)	25	312.5	ng/mL
d-Methamphetamine	25	312.5	ng/mL
(±)-3,4-Methylenedioxymethamphetamine (MDMA)	25	312.5	ng/mL
(±)-3,4-Methylenedioxyethylamphetamine (MDEA)	25	312.5	ng/mL
Benzoylecgonine (BE)	25	125	ng/mL
Butalbital	25	250	ng/mL
Codeine	25	375	ng/mL
Nordiazepam	25	250	ng/mL
Hydrocodone	25	125	ng/mL
Hydromorphone	25	125	ng/mL
Lorazepam	25	250	ng/mL
Methadone	25	250	ng/mL
Methadone Primary Metabolite (EDDP)	25	250	ng/mL
Methaqualone	25	250	ng/mL
Morphine-3-β-D-Glucuronide	25	608*	ng/mL
6-Monoacetylmorphine (6-MAM)	25	12.5	ng/mL
Nortriptyline	25	250	ng/mL
Oxazepam	25	250	ng/mL
Oxycodone	25	62.5	ng/mL
Oxymorphone	25	62.5	ng/mL
Pentobarbital	25	250	ng/mL
Phencyclidine (PCP)	25	31.25	ng/mL
Phenobarbital	25	250	ng/mL
Norpropoxyphene	25	250	ng/mL
Secobarbital	25	250	ng/mL
Temazepam	25	250	ng/mL
(l)-9-Carboxy-11-nor-Delta-9-THC (THC-COOH)	25	18.75	ng/mL

** Equivalent to 375 ng/mL of free Morphine.*

Urine Controls

DAU High Cutoff 1

REF 50700

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
α-Hydroxyalprazolam	25	225 ng/mL
Amobarbital	25	225 ng/mL
d-Amphetamine	25	375 ng/mL
(±)-3,4-Methylenedioxyamphetamine (MDA)	25	375 ng/mL
d-Methamphetamine	25	375 ng/mL
(±)-3,4-Methylenedioxymethamphetamine (MDMA)	25	375 ng/mL
(±)-3,4-Methylenedioxyethylamphetamine (MDEA)	25	375 ng/mL
Benzoylecgonine (BE)	25	112.5 ng/mL
Butalbital	25	225 ng/mL
Codeine	25	1500 ng/mL
Nordiazepam	25	225 ng/mL
Hydrocodone	25	300 ng/mL
Hydromorphone	25	300 ng/mL
Lorazepam	25	225 ng/mL
Methadone	25	225 ng/mL
Methadone Primary Metabolite (EDDP)	25	225 ng/mL
Methaqualone	25	225 ng/mL
Morphine-3-β-D-Glucuronide	25	2430* ng/mL
6-Monoacetylmorphine (6-MAM)	25	7.5 ng/mL
Nortriptyline	25	225 ng/mL
Oxazepam	25	225 ng/mL
Oxycodone	25	225 ng/mL
Oxymorphone	25	225 ng/mL
Pentobarbital	25	225 ng/mL
Phencyclidine (PCP)	25	18.75 ng/mL
Phenobarbital	25	225 ng/mL
Norpropoxyphene	25	225 ng/mL
Secobarbital	25	225 ng/mL
Temazepam	25	225 ng/mL
(I)-9-Carboxy-11-nor-Delta-9-THC (THC-COOH)	25	11.25 ng/mL

** Equivalent to 1500 ng/mL of free Morphine.*

Urine Controls

DAU High Cutoff 2

REF 50701

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
α-Hydroxyalprazolam	25	375 ng/mL
Amobarbital	25	375 ng/mL
d-Amphetamine	25	625 ng/mL
(±)-3,4-Methylenedioxyamphetamine (MDA)	25	625 ng/mL
d-Methamphetamine	25	625 ng/mL
(±)-3,4-Methylenedioxymethamphetamine (MDMA)	25	625 ng/mL
(±)-3,4-Methylenedioxyethylamphetamine (MDEA)	25	625 ng/mL
Benzoylecgonine (BE)	25	187.5 ng/mL
Butalbital	25	375 ng/mL
Codeine	25	2500 ng/mL
Nordiazepam	25	375 ng/mL
Hydrocodone	25	500 ng/mL
Hydromorphone	25	500 ng/mL
Lorazepam	25	375 ng/mL
Methadone	25	375 ng/mL
Methadone Primary Metabolite (EDDP)	25	375 ng/mL
Methaqualone	25	375 ng/mL
Morphine-3-β-D-Glucuronide	25	4050* ng/mL
6-Monoacetylmorphine (6-MAM)	25	12.5 ng/mL
Nortriptyline	25	375 ng/mL
Oxazepam	25	375 ng/mL
Oxycodone	25	375 ng/mL
Oxymorphone	25	375 ng/mL
Pentobarbital	25	375 ng/mL
Phencyclidine (PCP)	25	31.25 ng/mL
Phenobarbital	25	375 ng/mL
Norpropoxyphene	25	375 ng/mL
Secobarbital	25	375 ng/mL
Temazepam	25	375 ng/mL
(l)-9-Carboxy-11-nor-Delta-9-THC (THC-COOH)	25	18.75 ng/mL

** Equivalent to 2500 ng/mL of free Morphine.*

Urine Controls

DAU IA 1

REF 50600

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
d-Methamphetamine	25	225 ng/mL
Benzoylecgonine (BE)	25	50 ng/mL
Methadone	25	50 ng/mL
Methaqualone	25	50 ng/mL
Morphine	25	225 ng/mL
Oxazepam	25	50 ng/mL
Phencyclidine (PCP)	25	5 ng/mL
Propoxyphene	25	50 ng/mL
Secobarbital	25	50 ng/mL
(l)-9-Carboxy-11-nor-Delta-9-THC (THC-COOH)	25	10 ng/mL

Urine Controls

DAU IA 2

REF 50601

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
d-Methamphetamine	25	375 ng/mL
Benzoylecgonine (BE)	25	112.5 ng/mL
Methadone	25	112.5 ng/mL
Methaqualone	25	112.5 ng/mL
Morphine	25	375 ng/mL
Oxazepam	25	75 ng/mL
Phencyclidine (PCP)	25	9.375 ng/mL
Propoxyphene	25	112.5 ng/mL
Secobarbital	25	75 ng/mL
(l)-9-Carboxy-11-nor-Delta-9-THC (THC-COOH)	25	15 ng/mL

Urine Controls

DAU IA 3

REF 50602

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
d-Methamphetamine	25	750 ng/mL
Benzoylecgonine (BE)	25	225 ng/mL
Methadone	25	225 ng/mL
Methaqualone	25	225 ng/mL
Morphine	25	1500 ng/mL
Oxazepam	25	150 ng/mL
Phencyclidine (PCP)	25	18.75 ng/mL
Propoxyphene	25	225 ng/mL
Secobarbital	25	150 ng/mL
(l)-9-Carboxy-11-nor-Delta-9-THC (THC-COOH)	25	37.5 ng/mL

Urine Controls

DAU IA 4

REF 50603

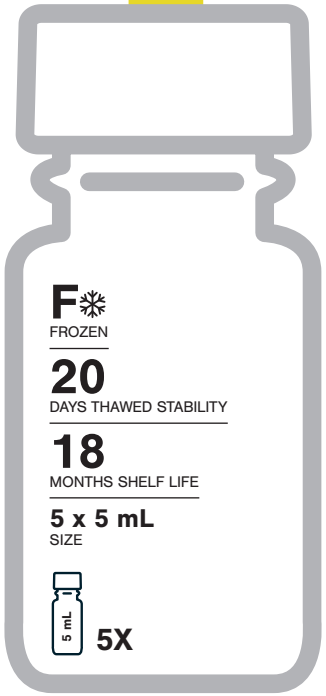
Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
d-Methamphetamine	25	1250 ng/mL
Benzoylecgonine (BE)	25	375 ng/mL
Methadone	25	375 ng/mL
Methaqualone	25	375 ng/mL
Morphine	25	2500 ng/mL
Oxazepam	25	250 ng/mL
Phencyclidine (PCP)	25	31.25 ng/mL
Propoxyphene	25	375 ng/mL
Secobarbital	25	250 ng/mL
(l)-9-Carboxy-11-nor-Delta-9-THC (THC-COOH)	25	62.5 ng/mL

Urine Controls

DAU IA 5

REF 50604

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
d-Methamphetamine	25	1500 ng/mL
Benzoylecgonine (BE)	25	625 ng/mL
Methadone	25	625 ng/mL
Methaqualone	25	625 ng/mL
Morphine	25	3000 ng/mL
Oxazepam	25	375 ng/mL
Phencyclidine (PCP)	25	93.75 ng/mL
Propoxyphene	25	625 ng/mL
Secobarbital	25	375 ng/mL
(l)-9-Carboxy-11-nor-Delta-9-THC (THC-COOH)	25	125 ng/mL

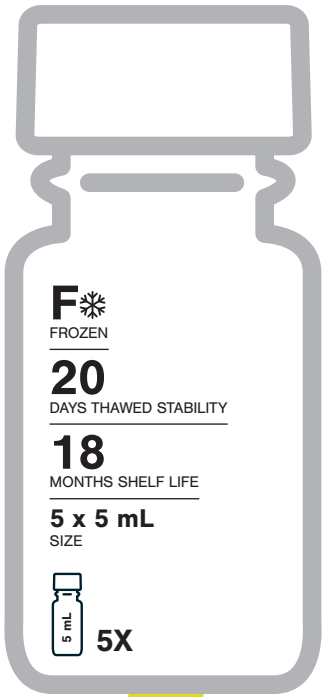


Urine Controls

EtG Plus Level 1

REF 13020

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
Ethyl-β-D-Glucuronide (EtG)	20	500 ng/mL
Ethyl Sulfate (EtS)	20	200 ng/mL

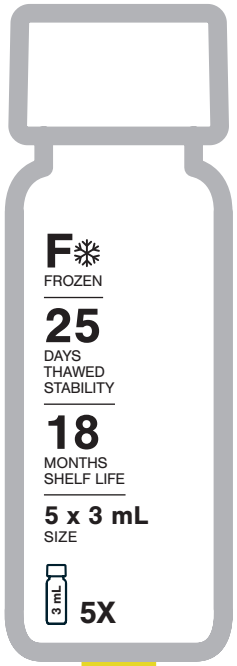


Urine Controls

EtG Plus Level 2

REF 13021

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
Ethyl-β-D-Glucuronide (EtG)	20	2000 ng/mL
Ethyl Sulfate (EtS)	20	800 ng/mL

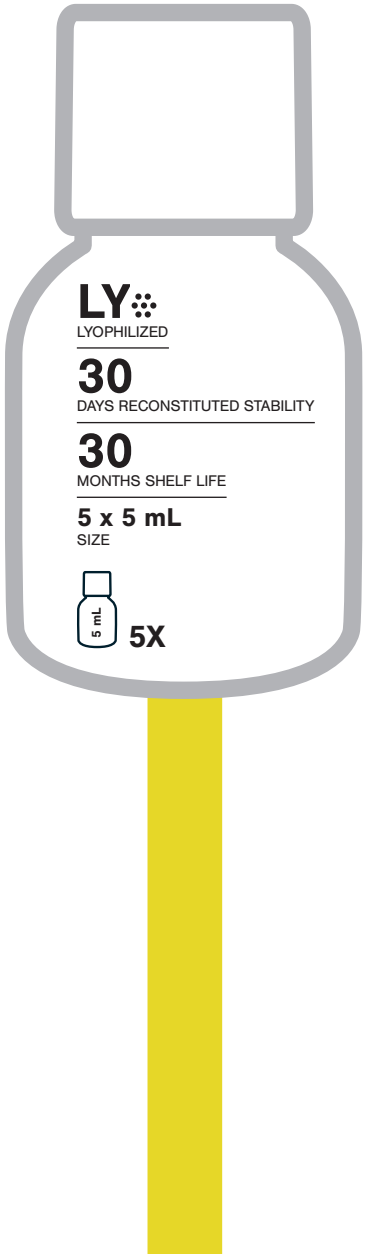


Urine Controls

Fentanyl Analogues 5 ng/mL

REF **10186**

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
4-ANPP	25	5 ng/mL
Acetylfentanyl	25	5 ng/mL
Acrylfentanyl	25	5 ng/mL
Alfentanil	25	5 ng/mL
Butyryl Fentanyl	25	5 ng/mL
Carfentanyl	25	5 ng/mL
cis-3-Methylfentanyl	25	5 ng/mL
Crotonylfentanyl	25	5 ng/mL
Fentanyl	25	5 ng/mL
Furanyl Fentanyl	25	5 ng/mL
Isobutyrylfentanyl	25	5 ng/mL
m-Methylmethoxyacetylfentanyl	25	5 ng/mL
Methoxyacetylfentanyl	25	5 ng/mL
Norfentanyl	25	5 ng/mL
Ocfentanyl	25	5 ng/mL
ortho-Fluorofentanyl	25	5 ng/mL
para-Fluorobutyrylfentanyl	25	5 ng/mL
para-Fluoroisobutyrylfentanyl	25	5 ng/mL
para-Fluorofentanyl	25	5 ng/mL
Sufentanil	25	5 ng/mL
Tetrahydrofuran Fentanyl	25	5 ng/mL
U-47700	25	5 ng/mL
U-49900	25	5 ng/mL
U51754	25	5 ng/mL
Valerylfentanyl	25	5 ng/mL
Cyclopropylfentanyl	25	5 ng/mL

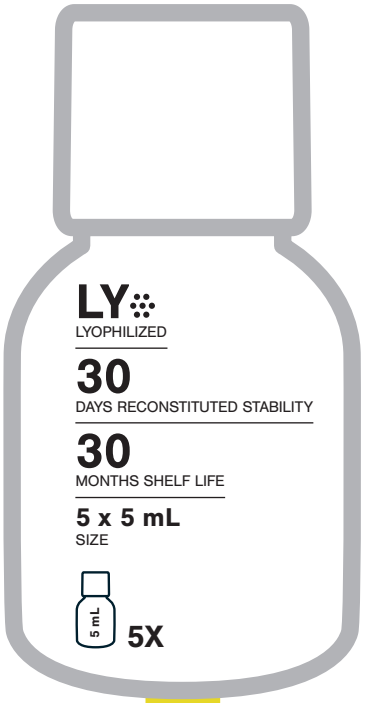


Urine Controls

HR Metals

REF 12110

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	
Aluminum	30	
Arsenic	30	
Cadmium	30	
Calcium	30	
Chromium	30	
Cobalt	30	
Copper	30	**Values approximate**
Creatinine	30	**Elevated Adult Range**
Fluoride	30	
Iron	30	
Lead	30	
Manganese	30	
Mercury	30	
Molybdenum	30	
Nickel	30	
Selenium	30	
Vanadium	30	
Zinc	30	

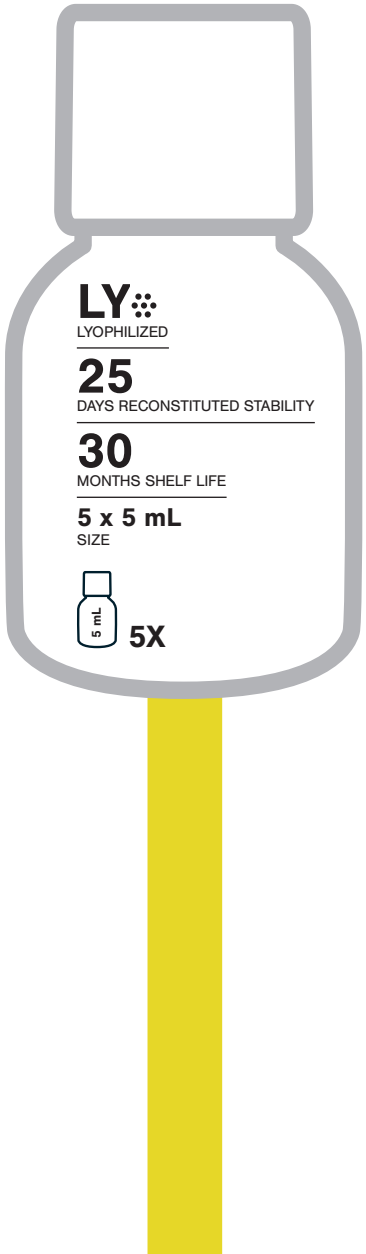


Urine Controls

NR Metals

REF **12111**

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	
Aluminum	30	
Arsenic	30	
Cadmium	30	
Calcium	30	
Chromium	30	
Cobalt	30	
Copper	30	**Values approximate**
Creatinine	30	**Normal Adult Range**
Fluoride	30	
Iron	30	
Lead	30	
Manganese	30	
Mercury	30	
Molybdenum	30	
Nickel	30	
Selenium	30	
Vanadium	30	
Zinc	30	

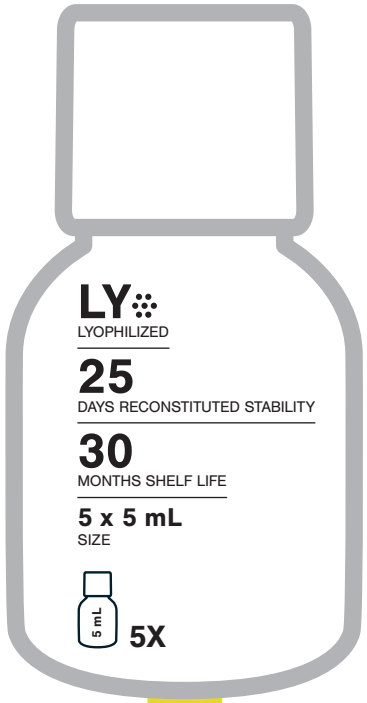


Urine Controls

Miscellaneous Panel Level 1

REF 41430

Analyte	Stability	Gravimetrically Weighed Value	
	(Days)		Units
Carisoprodol	25	500	ng/mL
Cocaine	25	100	ng/mL
Benzoylecgonine (BE)	25	100	ng/mL
Cocaethylene	25	100	ng/mL
Cyclobenzaprine	25	500	ng/mL
Meprobamate	25	500	ng/mL
Methaqualone	25	100	ng/mL
Methylphenidate	25	500	ng/mL
Phencyclidine (PCP)	25	100	ng/mL
Ritalinic Acid	25	500	ng/mL
Zolpidem	25	200	ng/mL
(I)-9-Carboxy-11-nor-Delta-9-THC (THC-COOH)	25	100	ng/mL

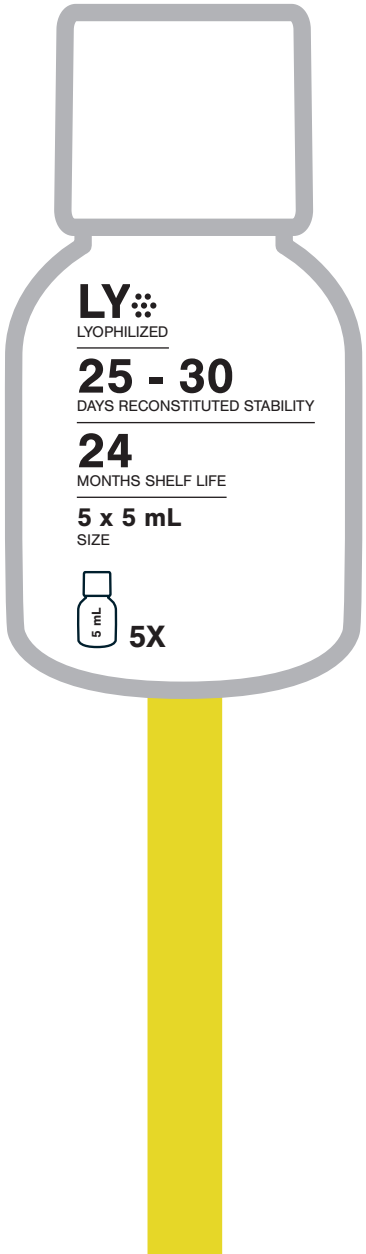


Urine Controls

Miscellaneous Panel Level 2

REF 41431

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
Carisoprodol	25	1500 ng/mL
Cocaine	25	300 ng/mL
Benzoylecgonine (BE)	25	300 ng/mL
Cocaethylene	25	300 ng/mL
Cyclobenzaprine	25	1500 ng/mL
Meprobamate	25	1500 ng/mL
Methaqualone	25	300 ng/mL
Methylphenidate	25	1500 ng/mL
Phencyclidine (PCP)	25	300 ng/mL
Ritalinic Acid	25	1500 ng/mL
Zolpidem	25	600 ng/mL
(I)-9-Carboxy-11-nor-Delta-9-THC (THC-COOH)	25	300 ng/mL

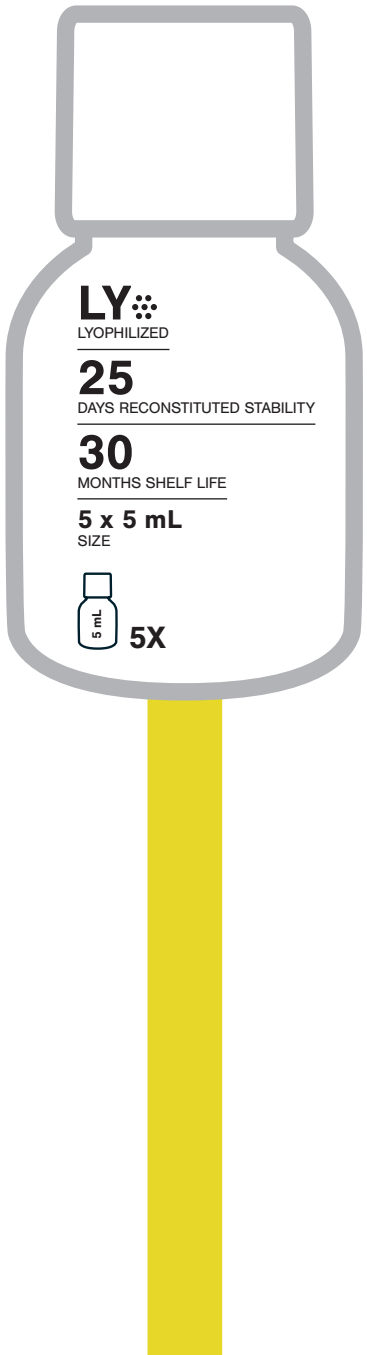


Urine Controls

PM 100

REF **21070**

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
Buprenorphine	25	100 ng/mL
Norbuprenorphine	25	100 ng/mL
Codeine	30	100 ng/mL
Fentanyl	25	10 ng/mL
Norfentanyl	30	10 ng/mL
Hydrocodone	30	100 ng/mL
Hydromorphone	30	100 ng/mL
Meperidine	30	100 ng/mL
Methadone	30	100 ng/mL
Methadone Primary Metabolite (EDDP)	30	100 ng/mL
Morphine	30	100 ng/mL
Oxycodone	30	100 ng/mL
Oxymorphone	25	100 ng/mL
Tapentadol	25	100 ng/mL
Tramadol	25	100 ng/mL

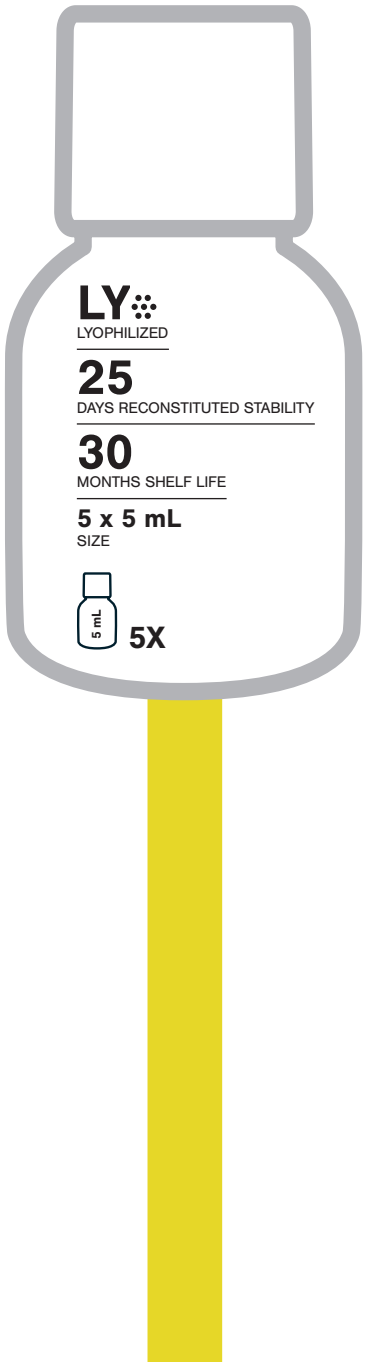


Urine Controls

PM Plus Low

REF 91000

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
Buprenorphine	25	50 ng/mL
Norbuprenorphine	25	50 ng/mL
Codeine	25	50 ng/mL
Norcodeine	25	50 ng/mL
Fentanyl	25	5 ng/mL
Norfentanyl	25	5 ng/mL
Hydrocodone	25	50 ng/mL
Norhydrocodone	25	50 ng/mL
Hydromorphone	25	50 ng/mL
Meperidine	25	50 ng/mL
Normeperidine	25	50 ng/mL
Methadone	25	50 ng/mL
Methadone Primary Metabolite (EDDP)	25	50 ng/mL
Morphine	25	50 ng/mL
6-Monoacetylmorphine (6-MAM)	25	5 ng/mL
Oxycodone	25	50 ng/mL
Noroxycodone	25	50 ng/mL
Oxymorphone	25	50 ng/mL
Noroxymorphone	25	50 ng/mL
Tapentadol	25	50 ng/mL
N-Desmethyltapentadol	25	50 ng/mL
Tramadol	25	50 ng/mL
O-Desmethyl-*cis*-Tramadol	25	50 ng/mL

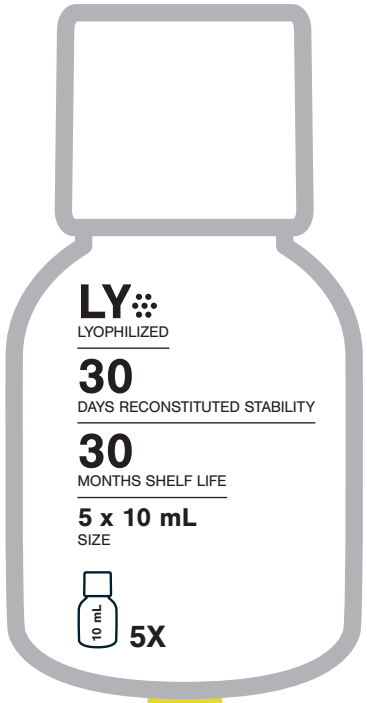


Urine Controls

PM Plus High

REF 91002

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
Buprenorphine	25	400 ng/mL
Norbuprenorphine	25	400 ng/mL
Codeine	25	400 ng/mL
Norcodeine	25	400 ng/mL
Fentanyl	25	40 ng/mL
Norfentanyl	25	40 ng/mL
Hydrocodone	25	400 ng/mL
Norhydrocodone	25	400 ng/mL
Hydromorphone	25	400 ng/mL
Meperidine	25	400 ng/mL
Normeperidine	25	400 ng/mL
Methadone	25	400 ng/mL
Methadone Primary Metabolite (EDDP)	25	400 ng/mL
Morphine	25	400 ng/mL
6-Monoacetylmorphine (6-MAM)	25	40 ng/mL
Oxycodone	25	400 ng/mL
Noroxycodone	25	400 ng/mL
Oxymorphone	25	400 ng/mL
Noroxymorphone	25	400 ng/mL
Tapentadol	25	400 ng/mL
N-Desmethyltapentadol	25	400 ng/mL
Tramadol	25	400 ng/mL
O-Desmethyl-*cis*-Tramadol	25	400 ng/mL

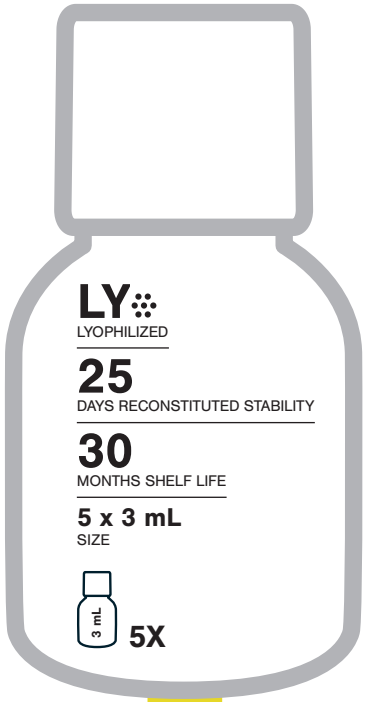


Urine Controls

Urine Drug Screen

REF 88121

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
Acetaminophen	30	5 µg/mL
d-Amphetamine	30	2 µg/mL
Benzoylecgonine (BE)	30	2 µg/mL
Codeine	30	2 µg/mL
Imipramine	30	1 µg/mL
Methadone	30	2 µg/mL
Methadone Primary Metabolite (EDDP)	30	2 µg/mL
Methaqualone	30	2 µg/mL
Morphine-3-β-D-Glucuronide	30	2 µg/mL
Oxazepam	30	2 µg/mL
Phencyclidine (PCP)	30	1 µg/mL
Phenobarbital	30	4 µg/mL
Propoxyphene	30	4 µg/mL
Quinine	30	2 µg/mL
Secobarbital	30	2 µg/mL



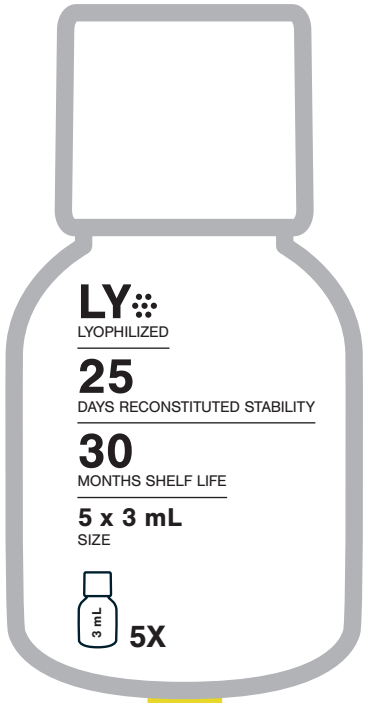
Urine Controls

Z Drugs Plus Level 1

REF **41500**

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
(±)-Baclofen	25	100 ng/mL
Dextromethorphan (DXM)	25	100 ng/mL
Dextrorphan	25	300 ng/mL
Gabapentin	25	2000 ng/mL
Ketamine	25	200 ng/mL
Norketamine	25	200 ng/mL
Lamotrigine	25	500 ng/mL
Mitragynine	*	25 ng/mL
Naloxone	25	100 ng/mL
Naltrexone	25	100 ng/mL
6-β-Naltrexol	25	10 ng/mL
Pregabalin	25	2000 ng/mL
Topiramate	25	500 ng/mL
Zaleplon	25	5 ng/mL
Zopiclone	25	5 ng/mL
Zolpidem	25	5 ng/mL
Zolpidem Phenyl-4-carboxylic Acid	25	5 ng/mL

** Mitragynine is weighed and spiked into this control, but no claim is made for expected values or stability.*



Urine Controls

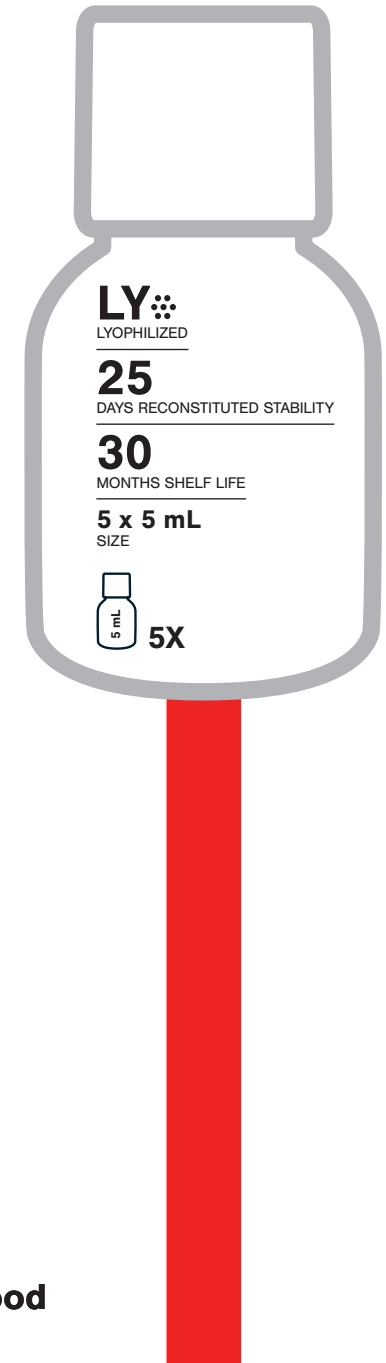
Z Drugs Plus Level 2

REF 41501

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
(±)-Baclofen	25	300 ng/mL
Dextromethorphan (DXM)	25	300 ng/mL
Dextrorphan	25	600 ng/mL
Gabapentin	25	6000 ng/mL
Ketamine	25	600 ng/mL
Norketamine	25	600 ng/mL
Lamotrigine	25	1000 ng/mL
Mitragynine	*	250 ng/mL
Naloxone	25	300 ng/mL
Naltrexone	25	300 ng/mL
6-β-Naltrexol	25	50 ng/mL
Pregabalin	25	6000 ng/mL
Topiramate	25	1000 ng/mL
Zaleplon	25	50 ng/mL
Zopiclone	25	50 ng/mL
Zolpidem	25	50 ng/mL
Zolpidem Phenyl-4-Carboxylic Acid	25	50 ng/mL

** Mitragynine is weighed and spiked into this control, but no claim is made for expected values or stability.*

Whole Blood Controls



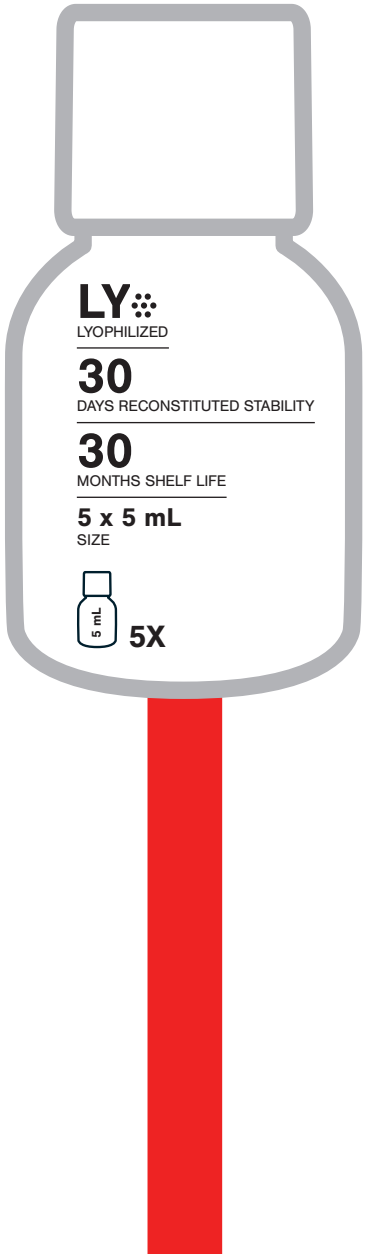
Whole Blood Controls

Benzodiazepines Plus 100 ng/mL

REF 12100

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
Alprazolam	25	100 ng/mL
α-Hydroxyalprazolam	25	100 ng/mL
Chlordiazepoxide	25	100 ng/mL
Clobazam	25	100 ng/mL
Clonazepam	25	100 ng/mL
7-Aminoclonazepam	*	100 ng/mL
Diazepam	25	100 ng/mL
Nordiazepam	25	100 ng/mL
Estazolam	25	100 ng/mL
Flunitrazepam	25	100 ng/mL
7-Aminoflunitrazepam	*	100 ng/mL
Flurazepam	25	100 ng/mL
Desalkylflurazepam	25	100 ng/mL
Hydroxyethylflurazepam	25	100 ng/mL
Lorazepam	25	100 ng/mL
Midazolam	25	100 ng/mL
Nitrazepam	25	100 ng/mL
7-Aminonitrazepam	*	100 ng/mL
Oxazepam	25	100 ng/mL
Temazepam	25	100 ng/mL
Triazolam	25	100 ng/mL
α-Hydroxytriazolam	25	100 ng/mL
Zolpidem	25	100 ng/mL

** 7-Amino metabolites are weighed and spiked into this control material, but no claim is made for expected values or stability.*

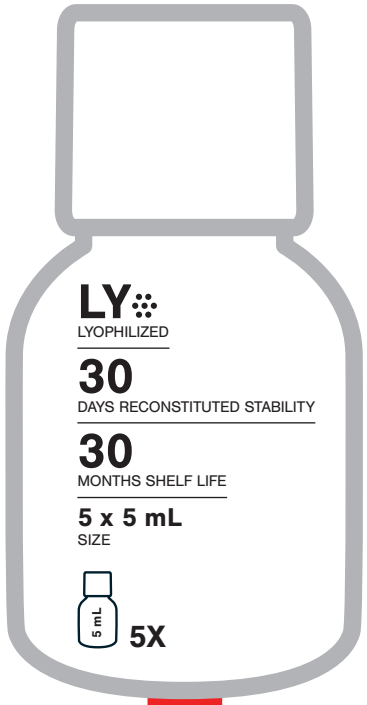


Whole Blood Controls

Drugs of Abuse Level 1

REF 98818

Analyte	Stability	Gravimetrically Weighed Value	
	(Days)		Units
d-Amphetamine	30	100	ng/mL
(±)-3,4-Methylenedioxyamphetamine (MDA)	30	100	ng/mL
d-Methamphetamine	30	100	ng/mL
(±)-3,4-Methylenedioxymethamphetamine (MDMA)	30	100	ng/mL
(±)-3,4-Methylenedioxyethylamphetamine (MDEA)	30	100	ng/mL
Cocaine	30	100	ng/mL
Benzoylecgonine (BE)	30	100	ng/mL
Cocaethylene	30	100	ng/mL
Codeine	30	100	ng/mL
Hydrocodone	30	100	ng/mL
Morphine	30	100	ng/mL
(I)-9-Carboxy-11-nor-Delta-9-THC (THC-COOH)	30	50	ng/mL

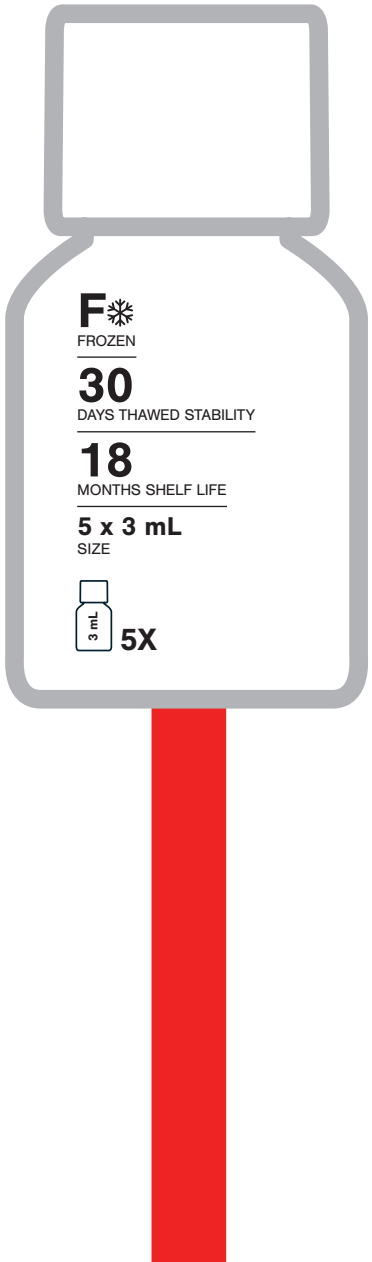


Whole Blood Controls

Drugs of Abuse Level 2

REF 98819

Analyte	Stability	Gravimetrically Weighed Value	
	(Days)		Units
d-Amphetamine	30	500	ng/mL
(±)-3,4-Methylenedioxyamphetamine (MDA)	30	500	ng/mL
d-Methamphetamine	30	500	ng/mL
(±)-3,4-Methylenedioxymethamphetamine (MDMA)	30	500	ng/mL
(±)-3,4-Methylenedioxyethylamphetamine (MDEA)	30	500	ng/mL
Cocaine	30	500	ng/mL
Benzoylecgonine (BE)	30	500	ng/mL
Cocaethylene	30	500	ng/mL
Codeine	30	500	ng/mL
Hydrocodone	30	500	ng/mL
Morphine	30	500	ng/mL
(I)-9-Carboxy-11-nor-Delta-9-THC (THC-COOH)	30	100	ng/mL

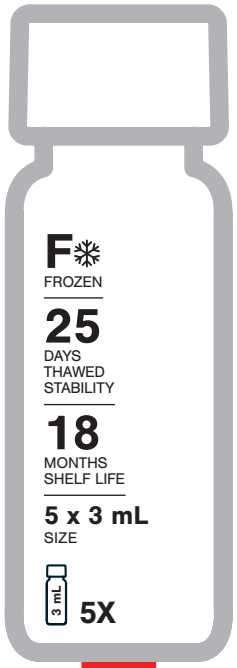


Whole Blood Controls

Ethanol 80 mg/dL

REF 31080

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
Ethanol	30	80 mg/dL

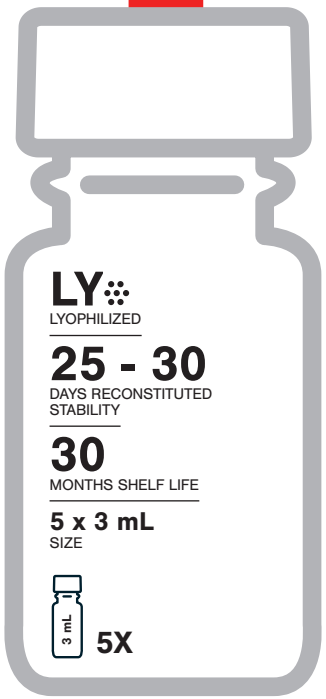


Whole Blood Controls

Fentanyl Analogues 2 ng/mL

REF **10189**

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
4-ANPP	25	2 ng/mL
Acetylfentanyl	25	2 ng/mL
Acrylfentanyl	25	2 ng/mL
Alfentanil	25	2 ng/mL
Butyryl Fentanyl	25	2 ng/mL
Carfentanyl	25	2 ng/mL
cis-3-Methylfentanyl	25	2 ng/mL
Crotonylfentanyl	25	2 ng/mL
Fentanyl	25	2 ng/mL
Furanyl Fentanyl	25	2 ng/mL
Isobutyrylfentanyl	25	2 ng/mL
m-Methylmethoxyacetylfentanyl	25	2 ng/mL
Methoxyacetylfentanyl	25	2 ng/mL
Norfentanyl	25	2 ng/mL
Ocfentanyl	25	2 ng/mL
ortho-Fluorofentanyl	25	2 ng/mL
para-Fluorobutyrylfentanyl	25	2 ng/mL
para-Fluoroisobutyrylfentanyl	25	2 ng/mL
para-Fluorofentanyl	25	2 ng/mL
Sufentanil	25	2 ng/mL
Tetrahydrofuran Fentanyl	25	2 ng/mL
U-47700	25	2 ng/mL
U-49900	25	2 ng/mL
U51754	25	2 ng/mL
Valerylfentanyl	25	2 ng/mL
Cyclopropylfentanyl	25	2 ng/mL

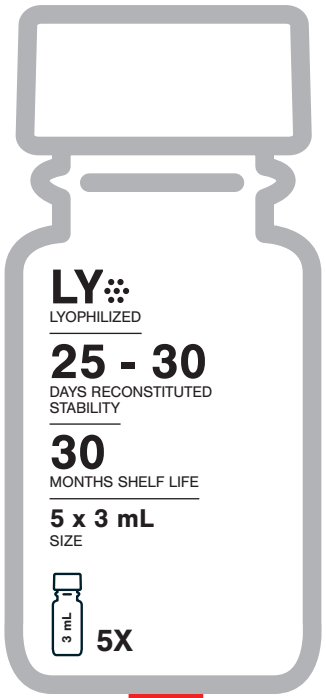


Whole Blood Controls

Immunosuppressants Level 1

REF 41630

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
Cyclosporine	30	90 ng/mL
Everolimus	25	4 ng/mL
Sirolimus	25	4 ng/mL
Tacrolimus	25	4 ng/mL

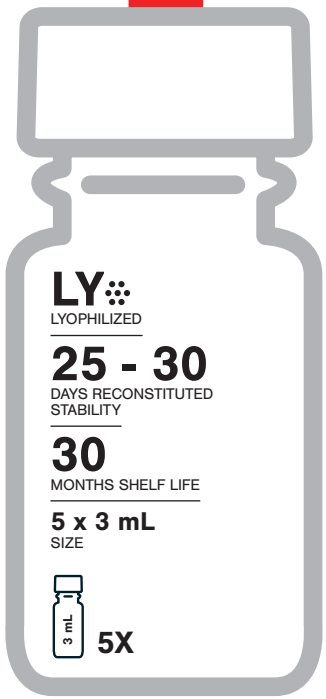


Whole Blood Controls

Immunosuppressants Level 2

REF 41631

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
Cyclosporine	30	500 ng/mL
Everolimus	25	15 ng/mL
Sirolimus	25	15 ng/mL
Tacrolimus	25	15 ng/mL

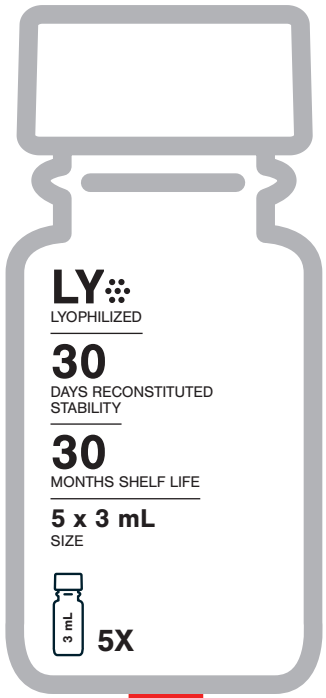


Whole Blood Controls

Immunosuppressants Level 3

REF 41632

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
Cyclosporine	30	1200 ng/mL
Everolimus	25	25 ng/mL
Sirolimus	25	25 ng/mL
Tacrolimus	25	25 ng/mL

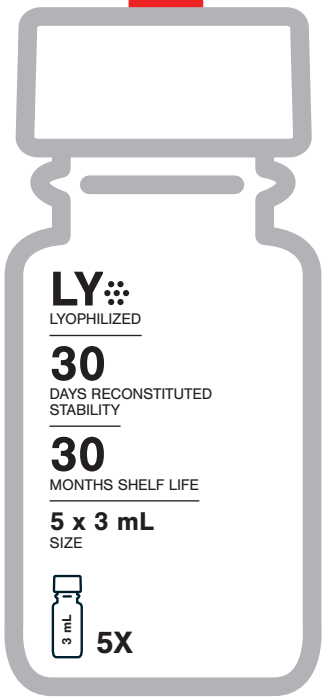


Whole Blood Controls

Lead Level 1

REF 93311

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
Lead	30	8 µg/dL

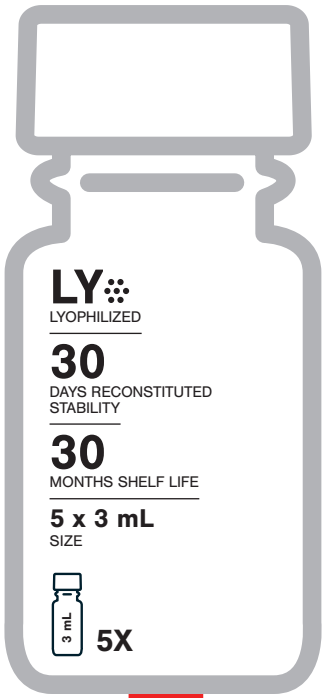


Whole Blood Controls

Lead Level 2

REF 93312

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
Lead	30	22 µg/dL

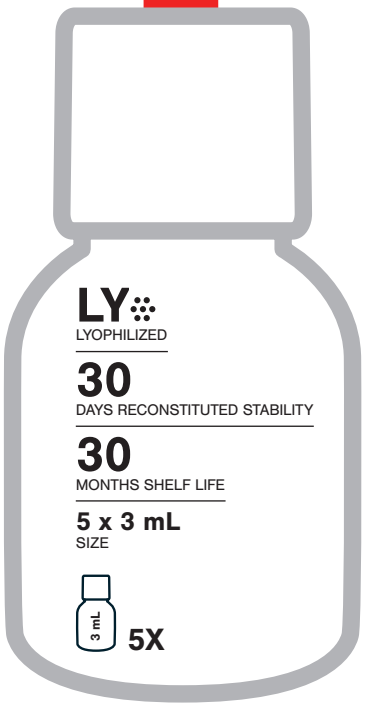


Whole Blood Controls

Lead Level 3

REF 93313

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
Lead	30	40 µg/mL

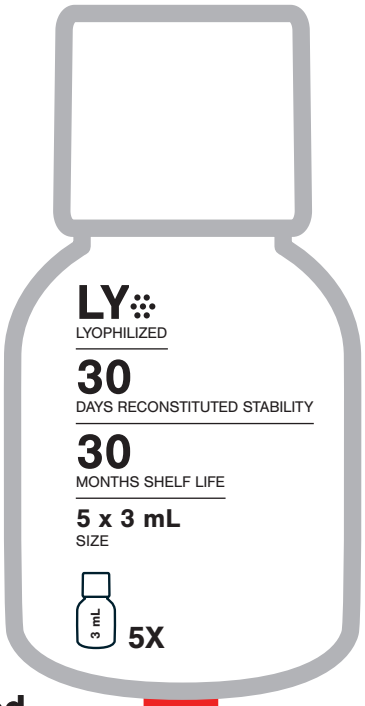


Whole Blood Controls

Metals Level 1

REF 44521

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	
Arsenic	30	
Cadmium	30	
Chromium	30	**Values approximate**
Lead	30	**Adult Normal**
Manganese	30	**Range**
Mercury	30	
Selenium	30	
Thallium	30	

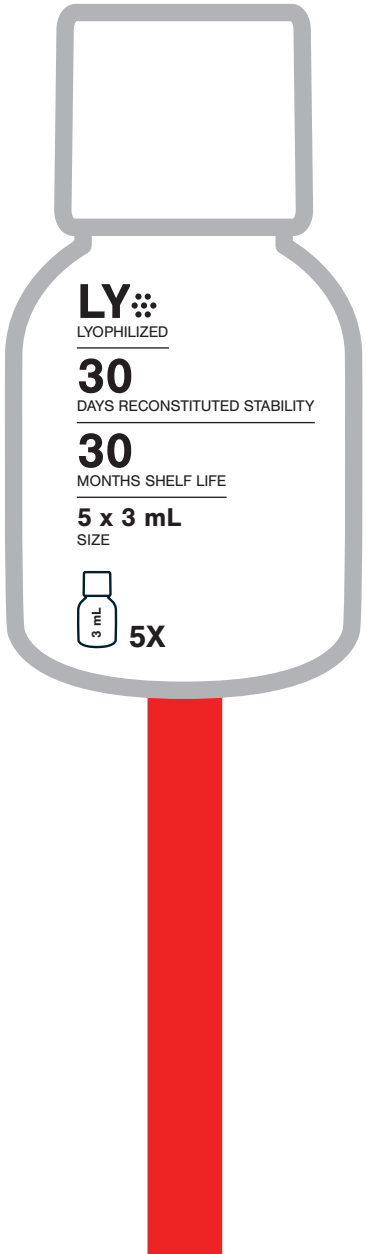


Whole Blood Controls

Metals Level 2

REF 44522

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	
Arsenic	30	
Cadmium	30	
Chromium	30	**Values approximate**
Lead	30	**Adult Elevated**
Manganese	30	**Range**
Mercury	30	
Selenium	30	
Thallium	30	

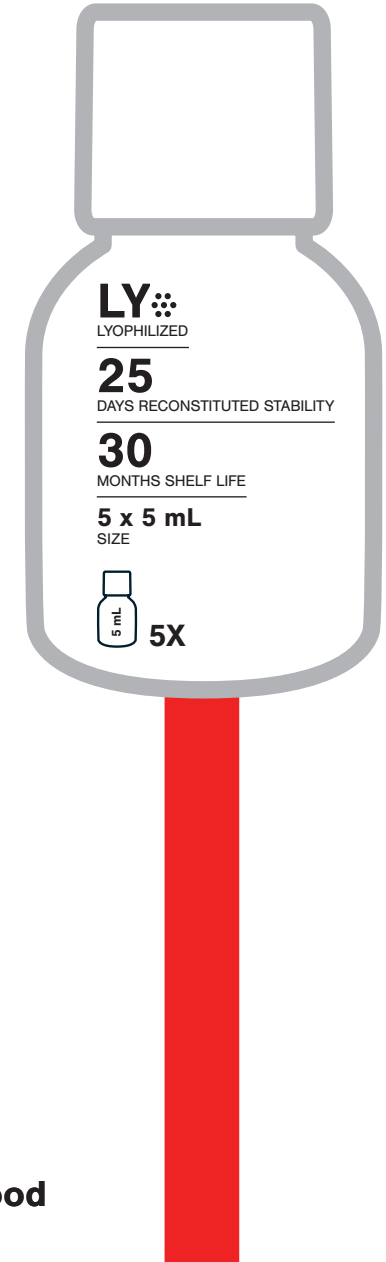


Whole Blood Controls

Metals Level 3

REF **44523**

Analyte	Stability (Days)	Gravimetrically Weighed Value
Arsenic	30	
Cadmium	30	
Chromium	30	**Values approximate**
Lead	30	**Adult High / Toxic**
Manganese	30	**Range**
Mercury	30	
Selenium	30	
Thallium	30	



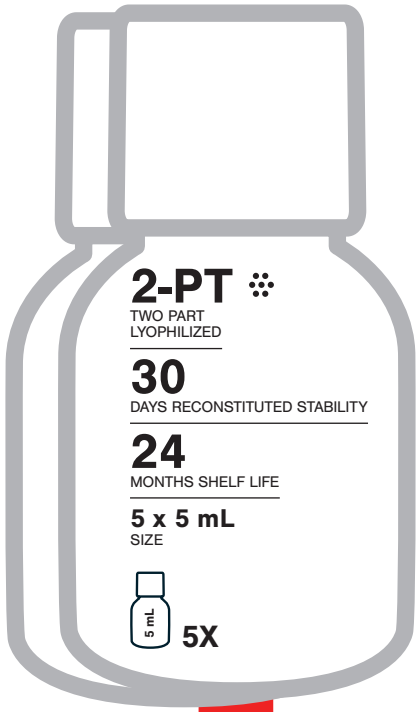
Whole Blood Controls

PM 100

REF 21080

Analyte	Stability (Days)	Gravimetrically Weighed Value	Units
Norbuprenorphine	*	10	ng/mL
Codeine	25	100	ng/mL
Fentanyl	25	10	ng/mL
Norfentanyl	25	10	ng/mL
Hydrocodone	25	100	ng/mL
Hydromorphone	25	100	ng/mL
Meperidine	25	100	ng/mL
Methadone	25	100	ng/mL
Methadone Primary Metabolite (EDDP)	*	100	ng/mL
Morphine	25	100	ng/mL
Oxycodone	25	100	ng/mL
Oxymorphone	25	100	ng/mL
Tapentadol	25	100	ng/mL
Tramadol	25	100	ng/mL

** Norbuprenorphine and Methadone Primary Metabolite (EDDP) are weighed and spiked into this control, but no claim is made for stability.*



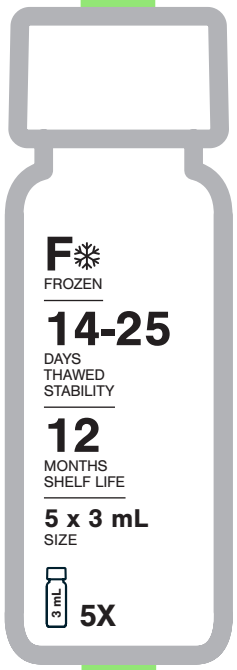
Whole Blood Controls

Volatiles

REF 99119

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
Acetone	30	80 mg/dL
Ethanol	30	150 mg/dL
Ethylene Glycol	30	80 mg/dL
Isopropanol	30	80 mg/dL
Methanol	30	40 mg/dL

Oral Fluid Controls

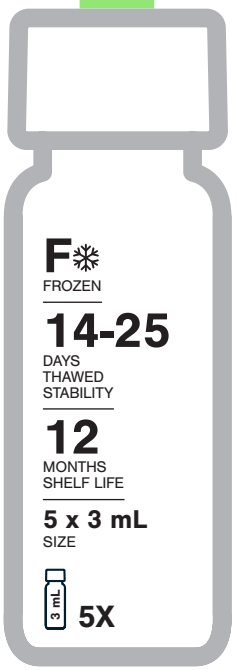


SMx Oral Fluid Controls

Drugs of Abuse 50% Cutoff

REF 43050

Analyte	Stability	Gravimetrically Weighed Value	
	(Days)		Units
d-Amphetamine	25	25	ng/mL
d-Methamphetamine	25	25	ng/mL
Benzoylecgonine (BE)	25	10	ng/mL
Methadone	25	2.5	ng/mL
Morphine	25	20	ng/mL
Oxazepam	25	25	ng/mL
Phencyclidine (PCP)	25	5	ng/mL
Propoxyphene	25	20	ng/mL
Secobarbital	25	15	ng/mL
Delta-9-THC	14	2	ng/mL

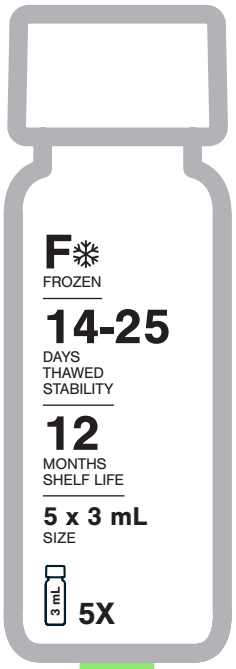


SMx Oral Fluid Controls

Drugs of Abuse Cutoff

REF 43051

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
d-Amphetamine	25	50 ng/mL
d-Methamphetamine	25	50 ng/mL
Benzoylecgonine (BE)	25	20 ng/mL
Methadone	25	5 ng/mL
Morphine	25	40 ng/mL
Oxazepam	25	50 ng/mL
Phencyclidine (PCP)	25	10 ng/mL
Propoxyphene	25	40 ng/mL
Secobarbital	25	30 ng/mL
Delta-9-THC	14	4 ng/mL



SMx Oral Fluid Controls

Drugs of Abuse 200% Cutoff

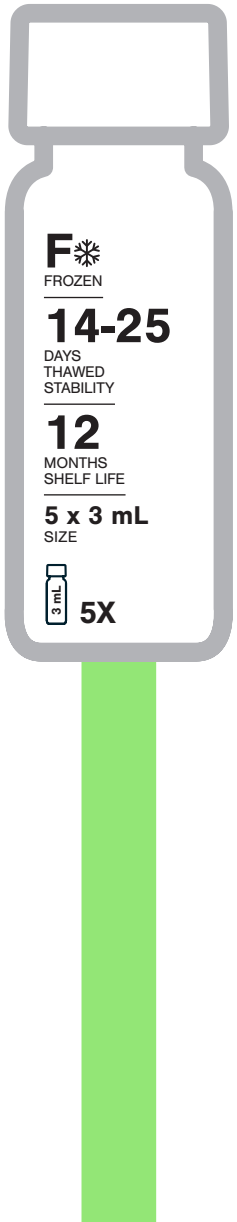
REF 43052

Analyte	Stability	Gravimetrically Weighed Value
	(Days)	Units
d-Amphetamine	25	100 ng/mL
d-Methamphetamine	25	100 ng/mL
Benzoylecgonine (BE)	25	40 ng/mL
Methadone	25	10 ng/mL
Morphine	25	80 ng/mL
Oxazepam	25	100 ng/mL
Phencyclidine (PCP)	25	20 ng/mL
Propoxyphene	25	80 ng/mL
Secobarbital	25	60 ng/mL
Delta-9-THC	14	8 ng/mL

SMx Oral Fluid Controls

SAMHSA Confirm Level 1

REF 81820

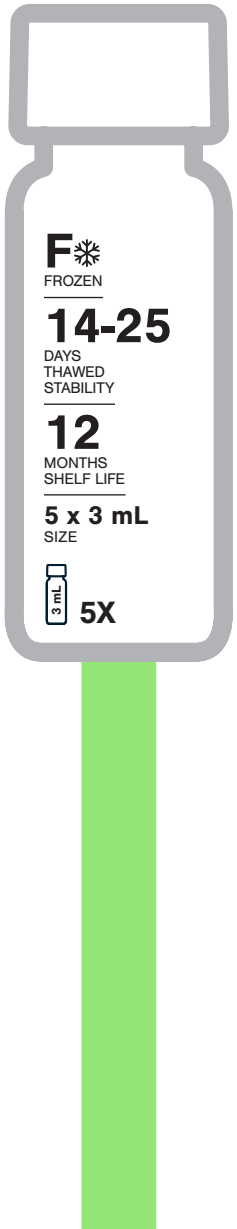


Analyte	Stability	Gravimetrically Weighed Value	
	(Days)		Units
Alprazolam	25	37.5	ng/mL
Amobarbital	25	90	ng/mL
d-Amphetmaine	25	11.25	ng/mL
d-Methamphetamine	25	11.25	ng/mL
(±)-3,4-Methylenedioxymethamphetamine (MDMA)	25	11.25	ng/mL
Buprenorphine	14	6	ng/mL
Butalbital	25	90	ng/mL
Carisoprodol	25	90	ng/mL
Cocaine	25	6	ng/mL
Benzoylecgonine (BE)	25	6	ng/mL
Codeine	25	11.25	ng/mL
Diazepam	25	37.5	ng/mL
Ethanol	25	75	mg/dL
Fentanyl	25	6	ng/mL
Hydrocodone	25	11.25	ng/mL
Hydromorphone	25	11.25	ng/mL
Lorazepam	25	37.5	ng/mL
Methadone	25	37.5	ng/mL
Morphine	25	11.25	ng/mL
6-Monoacetylmorphine (6-MAM)	25	1.5	ng/mL
Oxazepam	25	37.5	ng/mL
Oxycodone	25	11.25	ng/mL
Oxymorphone	25	11.25	ng/mL
Pentobarbital	25	90	ng/mL
Phencyclidine (PCP)	25	1.5	ng/mL
Phenobarbital	25	90	ng/mL
Propoxyphene	25	37.5	ng/mL
Secobarbital	25	90	ng/mL
Tapentadol	25	37.5	ng/mL
Temazepam	25	37.5	ng/mL
Tramadol	25	37.5	ng/mL
Zolpidem	25	37.5	ng/mL
Delta-9-THC	14	1.5	ng/mL

SMx Oral Fluid Controls

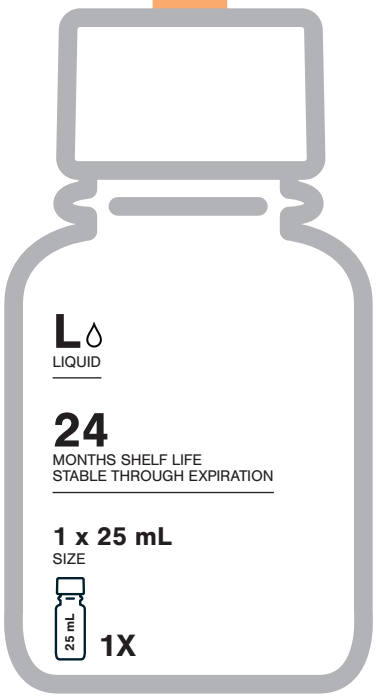
SAMHSA Confirm Level 2

REF 81821



Analyte	Stability	Gravimetrically Weighed Value	
	(Days)		Units
Alprazolam	25	62.5	ng/mL
Amobarbital	25	150	ng/mL
d-Amphetmaine	25	18.75	ng/mL
d-Methamphetamine	25	18.75	ng/mL
(±)-3,4-Methylenedioxymethamphetamine (MDMA)	25	18.75	ng/mL
Buprenorphine	14	10	ng/mL
Butalbital	25	150	ng/mL
Carisoprodol	25	150	ng/mL
Cocaine	25	10	ng/mL
Benzoylecgonine (BE)	25	10	ng/mL
Codeine	25	18.75	ng/mL
Diazepam	25	62.5	ng/mL
Ethanol	25	125	mg/dL
Fentanyl	25	10	ng/mL
Hydrocodone	25	18.75	ng/mL
Hydromorphone	25	18.75	ng/mL
Lorazepam	25	62.5	ng/mL
Methadone	25	62.5	ng/mL
Morphine	25	18.75	ng/mL
6-Monoacetylmorphine (6-MAM)	25	2.5	ng/mL
Oxazepam	25	62.5	ng/mL
Oxycodone	25	18.75	ng/mL
Oxymorphone	25	18.75	ng/mL
Pentobarbital	25	150	ng/mL
Phencyclidine (PCP)	25	2.5	ng/mL
Phenobarbital	25	150	ng/mL
Propoxyphene	25	62.5	ng/mL
Secobarbital	25	150	ng/mL
Tapentadol	25	62.5	ng/mL
Temazepam	25	2.5	ng/mL
Tramadol	25	62.5	ng/mL
Zolpidem	25	62.5	ng/mL
Delta-9-THC	14	2.5	ng/mL

Adulterant Controls



Adulterant Controls

Validity Control 1

REF 17010

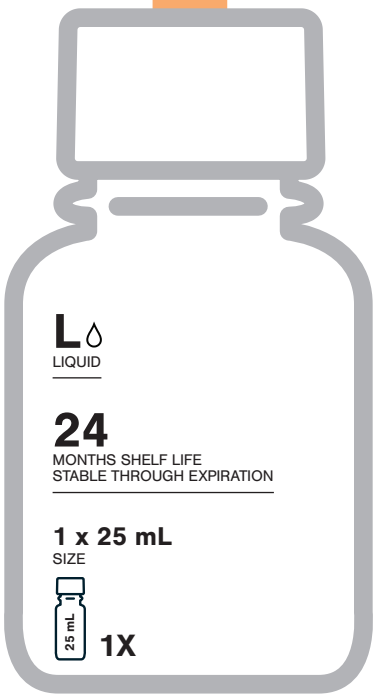
Analyte	Stability	Gravimetrically Weighed Value	Units
Chromium VI		N/A	µg/mL
Creatinine		N/A	mg/dL
Nitrites	Open Vial:	500 - 625	µg/mL
Oxidants	Stable Through	N/A	µg/mL
pH	Expiration Date	4.5 - 9.0	
Specific Gravity		1.0010 - 1.0027	

Adulterant Controls

Validity Control 2

REF 17011

Analyte	Stability	Gravimetrically Weighed Value	Units
Chromium VI		0	µg/mL
Creatinine	Open Vial:	1.0 - 1.5	mg/dL
Nitrites	Stable Through	0	µg/mL
Oxidants	Expiration Date	0	µg/mL
pH		3.2 - 4.0	
Specific Gravity		1.0210 - 1.0250	



Adulterant Controls

Validity Control 3

REF 17012

Analyte	Stability	Gravimetrically Weighed Value	Units
Chromium VI		N/A	µg/mL
Creatinine	Open Vial:	3.0 - 4.0	mg/dL
Nitrites	Stable Through	200 - 250	µg/mL
Oxidants	Expiration Date	N/A	µg/mL
pH		10.0 - 10.8	
Specific Gravity		0.9950 - 1.0005	

Adulterant Controls

Validity Control 4

REF 17013

Analyte	Stability	Gravimetrically Weighed Value	Units
Chromium VI		N/A	µg/mL
Creatinine	Open Vial:	21-25	mg/dL
Nitrites	Stable Through	N/A	µg/mL
Oxidants	Expiration Date	N/A	µg/mL
pH		4.5 - 5.0	
Specific Gravity		1.0040 - 1.0180	

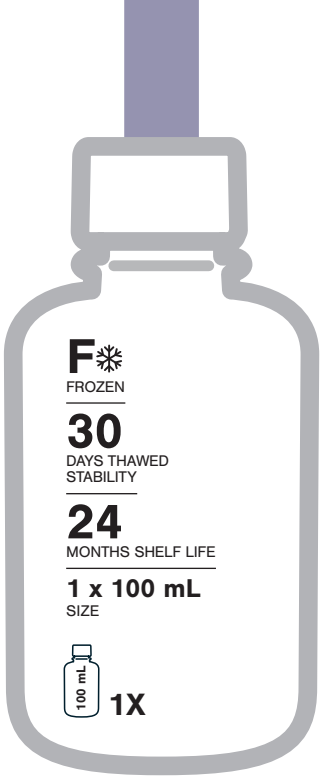
Adulterant Controls

Validity Control 5

REF **17014**

Analyte	Stability	Gravimetrically Weighed Value	Units
Chromium V		> 65	µg/mL
Creatinine	Open Vial:	N/A	
Nitrites	Stable Through	N/A	
Oxidants	Expiration Date	> 65	µg/mL
pH		11.2 - 12.0	
Specific Gravity		N/A	

Starting Matrix



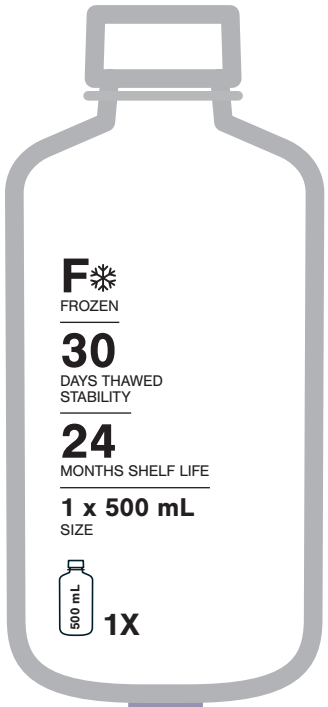
Starting Matrix

SMx Serum

REF 35700-SMX-S(F)

Our Specialty Matrix (SMx) Serum is a synthetic product designed specifically to mimic real human serum while eliminating unwanted endogenous analytes. UTAK's SMx Serum is an alternative to buffer solutions or stripped serums that are not representative of human matrix. SMx Serum minimizes matrix effects that occur in other synthetic serum products.

SMx Serum can be used on any testing platform, including LCMS, LC-MS/MS, GCMS, and Time of Flight (TOF).



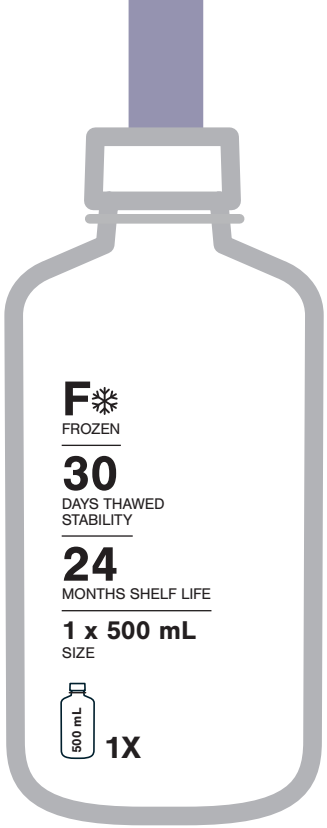
Starting Matrix

Defibrinated Plasma

REF 44600-D(500)

Our 100% Real defibrinated plasma is collected from healthy adults in FDA-licensed facilities within the United States. We screen our defibrinated plasma for common drugs of abuse and alcohol.

This product contains no preservatives and is suitable for all testing methods, including LCMS, LC-MS/MS, GCMS, Time of Flight (TOF), ELISA, EMIT and other immunoassays.



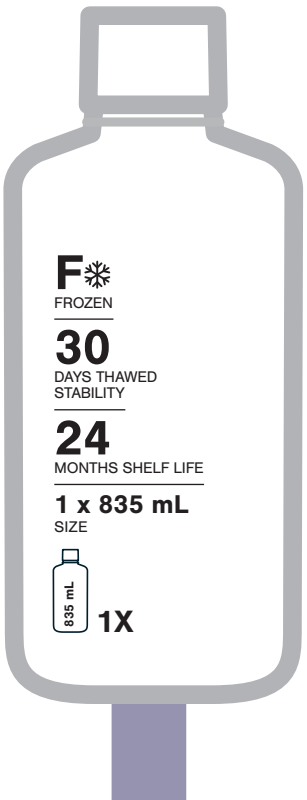
Starting Matrix

Normal Human Serum

REF 44600-S(500)

Our 100% Real Normal Human Serum is collected in FDA-licensed facilities within the United States from healthy adult donors. We screen our Normal Human Serum for common drugs of abuse and alcohol.

Our frozen serum is suitable for all testing methods, including LCMS, LC-MS/MS, GCMS, Time of Flight (TOF), ELISA, EMIT and other immunoassays. This product uses Potassium Oxalate as an anticoagulant and Sodium Fluoride for preservation.



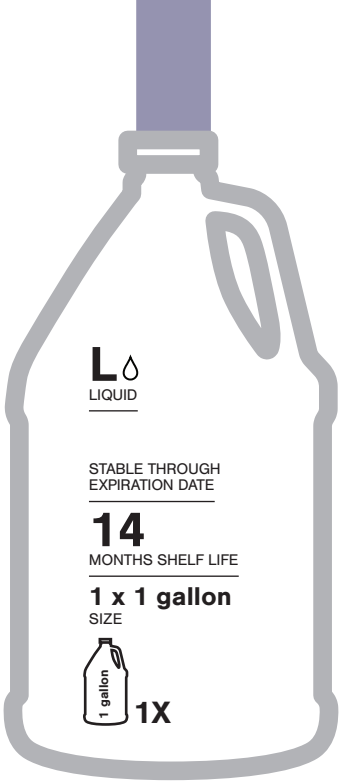
Starting Matrix

Certified Drug Free Urine

REF 88121-CDF(F)

Our 100% Real Human Urine is collected from healthy donors within the United States. We screen our urine for common drugs of abuse.

Our frozen urine contains no preservatives and is suitable for all testing methods, including LCMS, LC-MS/MS, GCMS, Time of Flight (TOF), ELISA, EMIT and other immunoassays.



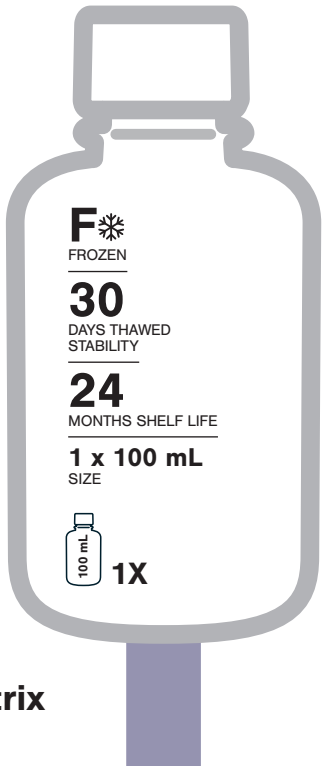
Starting Matrix

Certified Drug Free Urine

REF 88121-CDF(L)

Our 100% Real Human Urine is collected from healthy donors within the United States. We screen our urine for common drugs of abuse.

Our liquid urine contains Sodium Azide for preservation and is suitable for all testing methods, including LCMS, LC-MS/MS, GCMS, Time of Flight (TOF), ELISA, EMIT and other immunoassays.



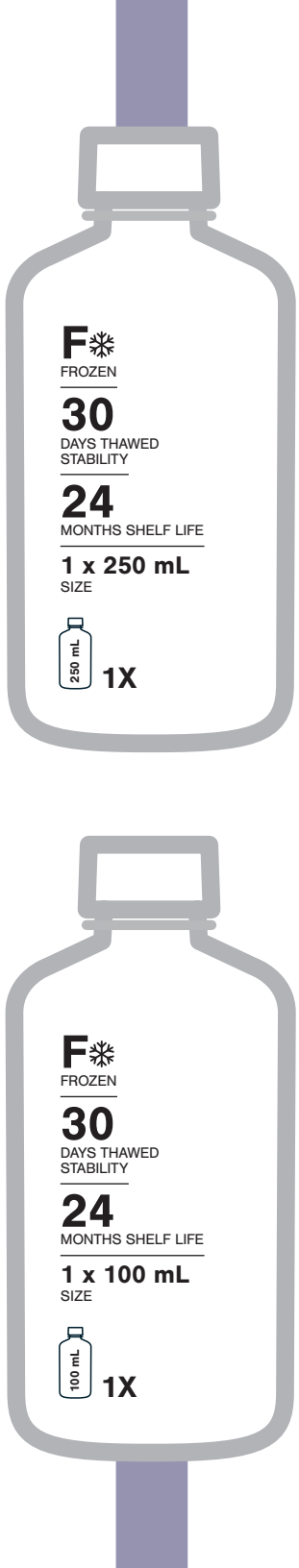
Starting Matrix

SMx Urine

REF 36000-SMX-U(F)

Our Specialty Matrix (SMx) Urine is a synthetic product designed specifically to mimic real human urine while eliminating unwanted endogenous analytes. SMx Urine is an alternative to buffer solutions that are not representative of human urine. Our proprietary synthetic urine formula matches human urine in pH and specific gravity.

SMx Urine can be used on any testing platform, including LCMS, LC-MS/MS, GCMS, and Time of Flight (TOF).



Starting Matrix

Blank Whole Blood

REF 44600-WB(F)

Our 100% Real Whole Blood is collected in FDA-licensed facilities within the United States from healthy adult donors. We screen our whole blood for common drugs of abuse and alcohol.

Our frozen blank whole blood is suitable for all testing methods, including LCMS, LC-MS/MS, GCMS, Time of Flight (TOF), ELISA, EMIT and other immunoassays. This product uses Potassium Oxalate as an anticoagulant and Sodium Fluoride for preservation.

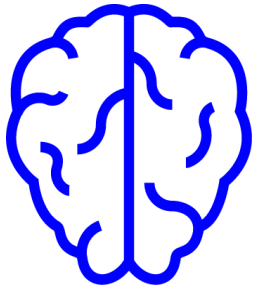
Starting Matrix

SMx Oral Fluid

REF 35400-SMX-OF(F)

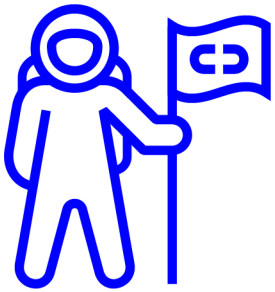
Our Specialty Matrix (SMx) Oral Fluid is a synthetic product designed specifically to mimic real human Oral Fluid while eliminating unwanted endogenous analytes. SMx Oral Fluid is an alternative to buffer solutions that are not representative of human saliva.

SMx Oral Fluid can be used on any testing platform, including LCMS, LC-MS/MS, GCMS, and Time of Flight (TOF).



You have a QC vision.
You've envisioned a future where QC is less risky, with fewer lab errors, less waste, and no more time spent re-running samples.

We know how to create control.
And we love the challenge of making your vision a reality. Small batches or large, one analyte or dozens, in any matrix you choose.



Together, we deliver the results you need.
We care about your results. Helping you achieve the accuracy you depend on is what makes us a *different* kind of control freak.

Personalized Custom Controls

You've told us time and time again that making QC is a hassle.

It's no fun at all. You'd rather spend your time developing exciting new methods or running patient samples.

And it's risky, too: The slightest error can cost your lab time and money.

Making QC may be the least exciting part of your day, but for Control Freaks like us, giving you control is the best part of what we do.

If you need a control that's not in our catalog, we'll work with you to design it. Creating controls you can't find anywhere else is how we got our start back in 1973; it's still the heart of what we do, nearly half a century later.

We've made it easier than ever to request a personalized control:

1. Contact our Control Freaks through phone, email, fax, or our website.

2. Answer a few quick questions about the matrix, analytes, and volume you need.

3. Our Control Freaks source the purest compounds and highest-quality materials to design your control.

4. Within a few days, we'll provide a quote for a control especially formulated to match your needs.

5. Using the same precise, nimble manufacturing techniques we use for our readily-available, off-the-shelf products, we'll make your vision come to life.

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Analyte Index

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