



HRN 10		HRN 10		95.7	89.5-98.8
	+	53	4		
	-	0	37		
K2 20		K2 1		>99.9	98.6-100.0
	+	44	0		
	-	0	168		
KET 1,000		KET 25		98.8	93.2-100.0
	+	43	0		
	-	1	36		
THC 50		THC 15		99.3	96.0-100.0
	+	101	0		
	-	1	36		
MTD 300		MTD 300		97.6	94.6-99.2
	+	40	5		
	-	0	167		
mAMP 500		mAMP 250		94.8	90.9-97.4
	+	76	3		
	-	8	125		
mAMP 1,000		mAMP 500		96.5	92.5 – 98.7
	+	105	0		
	-	6	59		
MDMA 500		MDMA 250		99.5	97.4-100.0
	+	43	0		
	-	1	168		
MOP 300		MOP 300		99.1	96.6 – 99.9
	+	38	0		
	-	2	172		
OPI 2,000		OPI 2,000		89.1	84.5-92.7
	+	144	7		
	-	20	76		
OXY 100		OXY 100		>99.9	98.2-99.2
	+	44	0		
	-	0	124		
PCP 25		PCP 25		97.2	93.9-99.0
	+	40	8		
	-	0	166		
TRA 200		TRA 200		97.6	94.0-99.4
	+	51	1		
	-	3	113		

These test assays provide preliminary results and may cross react to similar chemical compounds. In addition to the target analyte, the combination of cross reactants, may result in a positive result even if the target analyte is present below specified cut-offs.

Precision

A study was conducted by trained operators over 20 days using 3 different lots of product to demonstrate the within run, between run and between operator precision. A panel of coded specimens containing drug free urine, -50% cut-off, cut-off, +50% cut-off, 2x cut-off and 3x cut-off was tested for each drug assay. The results are summarized below.

Drug concentration Cut-off Range	AMP 500 (n=180)		AMP 1,000 (n=240)		BAR 300 (n=180)		BZO 300 (n=180)	
	#neg	#pos	#neg	#pos	#neg	#pos	#neg	#pos
0% Cut-off	180	0	240	0	180	0	180	0
-50% Cut-off	180	0	240	0	180	0	178	2
Cut-off	18	162	32	208	49	131	24	156
+50% Cut-off	0	180	0	240	0	180	0	180
2X Cut-off	0	180	0	240	0	180	0	180
3X Cut-off	0	180	0	240	0	180	0	180

Drug concentration Cut-off Range	BUP 10 (n=240)		COC 150 (n=180)		COC 300 (n=240)		ETG 500 (n=240)	
	#neg	#pos	#neg	#pos	#neg	#pos	#neg	#pos
0% Cut-off	240	0	180	0	240	0	240	0
-50% Cut-off	240	0	178	2	240	0	240	0
Cut-off	22	218	65	115	46	205	52	188
+50% Cut-off	0	240	0	180	0	240	240	0
2X Cut-off	0	240	0	180	0	240	240	0
3X Cut-off	0	240	0	180	0	240	240	0

Drug concentration Cut-off Range	FTY 20 (n=180)		HRN 10 (n=180)		K2 20 (n=180)		KET 1,000 (n=180)	
	#neg	#pos	#neg	#pos	#neg	#pos	#neg	#pos
0% Cut-off	180	0	180	0	240	0	180	0
-50% Cut-off	180	0	180	0	237	3	180	0
Cut-off	68	112	135	45	47	193	96	84
+50% Cut-off	0	180	3	177	1	239	2	178
2X Cut-off	0	180	0	180	0	240	0	180
3X Cut-off	0	180	0	180	0	240	0	180

Drug concentration Cut-off Range	THC 50 (n=180)		MTD 300 (n=180)		mAMP 500 (n=240)		mAMP 1,000 (n=240)		MDMA 500 (n=240)	
	#neg	#pos	#neg	#pos	#neg	#pos	#neg	#pos	#neg	#pos
0% Cut-off	180	0	180	0	240	0	240	0	240	0
-50% Cut-off	180	0	178	2	240	0	240	0	239	1
Cut-off	16	164	64	116	16	224	66	174	15	225
+50% Cut-off	0	180	0	180	0	240	0	240	0	240
2X Cut-off	0	180	0	180	0	240	0	240	0	240
3X Cut-off	0	180	0	180	0	240	0	240	0	240

Drug concentration Cut-off Range	MOP 300 (n=240)		OPI 2,000 (n=180)		OXY 100 (n=180)		PCP 25 (n=240)		TRA 200 (n=240)	
	#neg	#pos	#neg	#pos	#neg	#pos	#neg	#pos	#neg	#pos
0% Cut-off	240	0	180	0	240	0	240	0	240	0
-50% Cut-off	240	0	180	0	240	0	240	0	240	0
Cut-off	109	131	167	13	99	141	65	175	41	199
+50% Cut-off	1	239	3	177	0	240	0	240	0	240
2X Cut-off	0	240	0	180	0	240	0	240	0	240
3X Cut-off	0	240	0	180	0	240	0	240	0	240

Cross-Reactivity

Lateral flow chromatographic immunoassays may cross react to similar chemical compounds. The following table lists the concentration of compounds (ng/mL) that are detected positive in urine at 5 minutes.

Compound (Column 1A)		Compound (Column 1B)	
<b>AMP 500</b>		<b>HRN 10</b>	
(+/-) 3,4-MDA	800	6-Acetylmorphine	10
d-amphetamine	500	6-acetylcodeine	1,562
dl-amphetamine	1,500	Heroin (Diacetylmorphine)	10
phentermine	1,500	<b>KET 1,000</b>	
PMA(para-Methoxyamphetamine)	100	Ketamine	1,000
<b>AMP 1,000</b>		Ketamine, Dehydronor-	12,500
d-amphetamine	1,000	Norketamine	50,000
dl-amphetamine	3,000	<b>THC 50</b>	
(+/-)3,4-MDA	2,000	11-Hydroxy-Δ <sup>9</sup> -THC	12,500
Phentermine	3,000	11-nor-carboxy-Δ <sup>9</sup> -THC	37.5
PMA (para-Methoxyamphetamine)	100	11-Nor-Δ <sup>9</sup> -THC-9-COOH	50
<b>BAR 300</b>		Cannabinal	20,000
Allobarbitol	2,000	Δ <sup>9</sup> Tetrahydrocannabinol	15,000
Amobarbital	300	<b>MTD 300</b>	
Aprobarbital	500	Methadone	300
Barbital	781	EDDP	100,000
Butabarbitol	75	<b>mAMP 500</b>	
Butalbital	2,500	(+/-)3,4-MDEA	25,000
Cyclopentobarbital	2,500	(+/-)3,4-MDMA	1,000
Pentobarbital	300	d-amphetamine	50,000
Phenobarbital	100	d-Methamphetamine	500
Secobarbital	300	Ephedrine, 1R,2S(-)-	50,000
<b>BZO 300</b>		Fenfluramine	12,500
Alprazolam	196	l-Methamphetamine	4,000
Bromazepam	1,562	l-Phenylephrine	25,000
Chlordiazepoxide	3,750	Ranitidine hydrochloride	50,000
Clobazam	98	<b>mAMP 1,000</b>	
Clonazepam	781	(+/-)3,4-MDMA	2,000
Clorazepate	195	d-Methamphetamine	1,000
Desalkylflurazepam	390	Ephedrine, 1R,2S(-)-	75,000
Diazepam	195	l-Methamphetamine	8,000
Etizolam	25,000	(+/-)3,4-MDEA	50,000
Flunitrazepam	390	<b>MDMA 500</b>	
Lorazepam	1,562	(+/-)3,4-MDA	3,000
Lorazepam Glucuronide	156	(+/-)3,4-MDEA	300
Lormetazepam	3,125	(+/-)3,4-MDMA	500
Midazolam	12,500	d-methamphetamine	100,000
Nimetazepam	98	l-Methamphetamine	100,000
Nitrazepam	98	<b>MOP 300</b>	
Norchlordiazepoxide	195	6-Acetylmorphine	400
Nordiazepam	390	Codeine	300
Oxazepam	300	Dihydrocodeine	195
Oxazepam Glucuronide	50	Ethylmorphine	6,250
Temazepam	98	Heroin(Diacetylmorphine)	390
Temazepam Glucuronide	625	Hydrocodone	1,250
Triazolam	2,500	Hydromorphone	3,125
α-OH-Alprazolam	1,262	Levorphanol	1,500
<b>BUP 10</b>		Morphine	300
Buprenorphine	10	Morphine-3-β-D-glucuronide	1,000
Buprenorphine glucuronide	15	Nalorphine	100,000
Norbuprenorphine	20	Oxycodone	30,000
Norbuprenorphine glucuronide	200	Thebaine	6,250
<b>COC 150</b>		<b>OPI 2,000</b>	
Benzoyllecgonine	150	6-Acetylmorphine	5,000
Cocaethylene	6,250	Codeine	2,000
Cocaine	400	Dihydrocodeine	6,250
Ecgonine	12,500	Ethylmorphine	5,000
Ecgonine-Methyl Ester	50,000	Heroin(Diacetylmorphine)	6,250
<b>COC 300</b>		Hydrocodone	12,500
Benzoyllecgonine	300	Hydromorphone	5,000
Cocaethylene	12,500	Levorphanol	75,000
Cocaine	780	Morphine	2,000
Ecgonine	32,000	Morphine-3-β-D-glucuronide	2,000

Compound Column 2A (Continued from Column 1A)		Compound Column 2B (Continued from Column 1B)	
<b>ETG 500</b>		Nalorphine	6,250
Ethyl-β-D-Glucuronide	500	Oxycodone	25,000
Propyl β-D-Glucuronide	70,000	Oxymorphone	25,000
<b>FTY 20</b>		<b>OXY100</b>	
Alfentanyl	562	Hydrocodone	6,250
Buspirone	12,500	Hydromorphone	50,000
Carfentanil	625	Levorphanol	50,000
Fenfluramine	37,500	Naloxone	37,500
Fentanyl	100	Naltrexone	37,500
Norfentanyl	20	Oxycodone	100
Sufentanil	57,500	Oxymorphone	200
<b>K2 20</b>		<b>PCP 25</b>	
AM-2201-N-4-hydroxypentyl	300	Phencyclidine	25
JWH-018 N5 Hydroxypentyl	100	4-Hydroxyphencylidine	30
JWH-018 Pentanoic acid	20	Cyclobenzaprine	100,000
JWH-018-N-4-hydroxypentyl	312	Dextromethorphan	100,000
JWH-073 Butanoic acid	20	Methoxetamine	50,000
JWH-073-N-4- hydroxybutyl	100	<b>TRA 200</b>	
JWH-200-N-6-hydroxyindole	1,250	Cis-tramadol	200
RCS-4-N-5- Carboxypentyl	50,000	n-Desmethyl-cis-tramadol	250

Lateral flow chromatographic immunoassays may cross react to similar chemical compounds. The target analyte, in combination with cross reactants, may result in a positive result even if the target analyte is present below specified cut-offs.

Interference (Non Cross-Reacting Compounds)

The following table lists the substances that showed no interference when tested at the concentration of 100µg/ml(=100,000ng/ml).

Acetaminophen	Cotinine	Lidocaine	Pseudoephedrine, R,R(-)-
Acetylsalicylic Acid	Desipramine	Maprotiline	*Pseudoephedrine, S,S(+)-
Amitriptyline	Diphenhydramine	Meperidine	Ritalinic Acid
Bupropion	DL-Propanolol	Meprobamate	Salicylic Acid
Caffeine	Doxepin	Naproxen	Sertraline
Cannabidiol	Ecgonine methyl ester	Norpseudoephedrine	Tapentadol, N-Desmethyl-
Carisoprodol	*Ephedrine, 1S,2R(+)-	Nortriptyline	Thioridazine
(+/-) Chlorpheniramine	Fluoxetine	Venlafaxine,O-desmethyl	Trazodone
Chlorpromazine	Haloperidol	Olanzapine	Trimipramine
Cimetidine	Ibuprofen	Pentazocine	Venlafaxine, N-desmethyl
Clomipramine	Imipramine	Phenylpropanolamine	*Zolpidem Tartrate
Clonidine	Labetalol	Phenytoin	Venlafaxine
Clozapine	Lamotrigine	Protriptyline	

Note: \* These substances showed no interference at 50,000ng/mL.

Endogenous compounds

No Interference was observed of the following compounds up to the concentrations listed below:

Compounds	Concentration
Acetone	1.0 g/dL
Ascorbic acid	1.5 g/dL
Bilirubin	2.0 mg/dL
Boric acid	1% w/v
Creatinine	0.5 g/dL
Ethanol	1.0 g/dL
Galactose	0.01 g/dL
g-Globulin (IgG)	0.5 g/dL
Glucose	2.0 g/dL
Hemoglobin	115 mg/dL
Human Serum Albumin	0.5 g/dL
Oxalic Acid	0.1 g/dL
Riboflavin	7.5 mg/dL
Sodium Azide	1% w/v
Sodium chloride	6.0 g/dL
Sodium fluoride	1% w/v
Urea	6.0 g/dL

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