

**Analytical Specificity****ACL**

Drug – Cut-off 200 ng/mL	Concentration (ng/mL)
7-Aminoclonazepam	200
Oxazepam	>10,000
Alprazolam	>10,000
Bromazepam	>10,000
Chlordiazepoxide	>10,000
Clobazam	>10,000
Clonazepam	7,500
Clorazepate dipotassium	>10,000
Desalkylflurazepam	>10,000
Diazepam	>10,000
Estazolam	>10,000
Flunitrazepam	>50,000
(±) Lorazepam	7,500
Midazolam	>100,000
Nitrazepam	>10,000
Norchlordiazepoxide	>100,000
Nordiazepam	>100,000
Temazepam	>10,000

**AMP**

Drug - Cut-off 1000 ng/mL	Concentration (ng/mL)
D-Amphetamine	1,000
L-Amphetamine	>100,000
D-Methamphetamine	>100,000
L-Methamphetamine	>100,000
3,4-Methylenedioxyamphetamine (MDA)	1,000
3,4-Methylenedioxymethamphetamine (MDMA)	>100,000
3,4-Methylenedioxy-N-ethylamphetamine (MDEA)	>100,000
para-methoxyamphetamine (PMA)	625
Phentermine	1250
Tyramine	>100,000

Drug - Cut-off 500 ng/mL	Concentration (ng/mL)
D-Amphetamine	500
L-Amphetamine	50,000
3,4-Methylenedioxyamphetamine (MDA)	500
para-methoxyamphetamine (PMA)	625
Phentermine	1250
Tyramine	>100,000

Drug – Cut-off 300 ng/mL	Concentration (ng/mL)
D-Amphetamine	300
L-Amphetamine	50,000
3,4-Methylenedioxyamphetamine (MDA)	300
Mephentermine hemisulfate	>100,000
para-methoxyamphetamine (PMA)	625
Para- methoxymethamphetamine (PMMA)	>100,000
Phentermine	625
Tyramine	>100,000

**BAR**

Drug – Cut-off 300 ng/mL	Concentration (ng/mL)
Secobarbital	300
Allobarbital	1,250
Alphenal	625
Amobarbital	625
Aprobarbital	188
Butabarbital	94
Butalbital	2,500
Butethal	200
Cyclopentobarbital	400
Pentobarbital	300
Phenobarbital	300

Drug – Cut-off 200 ng/mL	Concentration (ng/mL)
Secobarbital	200
Allobarbital	860
Alphenal	500
Amobarbital	500

Aprobarbital	130
Butabarbital	70
Butalbital	1,800
Butethal	150
Cyclopentobarbital	300
Pentobarbital	200

**BUP**

Drug – Cut-off 10 ng/mL	Concentration (ng/mL)
Buprenorphine	10
Buprenorphine-3-β-D-glucuronide	10
Norbuprenorphine	50
Norbuprenorphine-3-β-D-glucuronide	100

Drug – Cut-off 5 ng/mL	Concentration (ng/mL)
Buprenorphine	5
Buprenorphine-3-β-d-glucunoride	5
Norbuprenorphine	25
Norbuprenorphine-3-β-d-glucunoride	50

**BZD**

Drug – Cut-off 300 ng/mL	Concentration (ng/mL)
Oxazepam	300
Alprazolam	125
Bromazepam	625
Chlordiazepoxide	2,500
Clobazam	63
Clonazepam	2,500
Clorazepate	3,330
Desalkflurazepam	250
Diazepam	250
Estazolam	5,000
Fentanyl	>100,000
Flunitrazepam	375
Flurazepam	>100,000
Lorazepam	1,250
Lormetazepam	1,250
Medazepam	>100,000
Midazolam	>100,000
Nitrazepam	25,000
Norchlordiazepoxide	250
Nordiazepam	500
Prazepam	>100,000
Temazepam	63
Triazolam	5,000

Drug – Cut-off 200 ng/mL	Concentration (ng/mL)
Oxazepam	200
Alprazolam	83
Bromazepam	417
Chlordiazepoxide	1,667
Clobazam	42
Clonazepam	1,667
Clorazepate	2,220
Desalkflurazepam	167
Diazepam	167
Estazolam	3,333
Fentanyl	>100,000
Flunitrazepam	250
Flurazepam	>100,000
Lorazepam	833
Lormetazepam	833
Medazepam	>100,000
Midazolam	>100,000
Nitrazepam	16,667
Norchlordiazepoxide	167
Nordiazepam	333
Prazepam	>100,000
Temazepam	42
Triazolam	3,333

Drug – Cut-off 100 ng/mL	Concentration (ng/mL)
Oxazepam	100
Alprazolam	42
Bromazepam	208
Chlordiazepoxide	833
Clobazam	21

Clonazepam	833
Clorazepate	1,110
Desalkflurazepam	83
Diazepam	83
Estazolam	1,667
Fentanyl	>100,000
Flunitrazepam	125
Flurazepam	>100,000
Lorazepam	417
Lormetazepam	417
Medazepam	>100,000
Midazolam	>100,000
Nitrazepam	8,333
Norchlordiazepoxide	83
Nordiazepam	167
Prazepam	>100,000
Temazepam	21
Triazolam	1,667

**CAT**

Drug – Cut-off 100 ng/mL	Concentration (ng/mL)
(+)-Norpseudoephedrine HCl (Cathine)	100
3,4-Methylenedioxyamphetamine (MDA)	50
D/L-Amphetamine	50
p-Hydroxyamphetamine	50
Tryptamine	10,000
Methoxyphenamine	10,000

**COC**

Drug – Cut-off 300 ng/mL	Concentration (ng/mL)
Benzoyllecgonine	300
Cocaine HCl	750
Cocaethylene	12,500
Ecgonine	32,000
Norcocaine	100,000

Drug – Cut-off 200 ng/mL	Concentration (ng/mL)
Benzoyllecgonine	200
Cocaine HCl	600
Cocaethylene	8,500
Ecgonine	20,000
Norcocaine	65,000

Drug – Cut-off 100 ng/mL	Concentration (ng/mL)
Benzoyllecgonine	100
Cocaine HCl	400
Cocaethylene	5,000
Ecgonine	10,000
Norcocaine	20,000

**COT**

Drug – Cut-off 1000 ng/mL	Concentration (ng/mL)
(-)-Cotinine	1,000
Buprenorphine	>100,000

Drug – Cut-off 200 ng/mL	Concentration (ng/mL)
(-)-Cotinine	200
(-)-Nicotine	6,250

**EDDP**

Drug – Cut-off 100 ng/ml	Concentration (ng/ml)
2-Ethylidene-1,5-dimethyl-3,3-diphenylpyrrolidine (EDDP)	100
Meperidine	>100,000
Metadone	>100,000
Norfentanyl	>100,000
Phencyclidine	>100,000
Promazine	50,000
Promethazine	25,000
Prothipendyl	50,000
Prozine	12,500

**FYL**

Drug – Cut-off 10 ng/mL	Concentration (ng/mL)
Fentanyl and Fentanyl metabolite	10

Fentanyl	200
Norfentanyl	50

**KET**

Drug – Cut-off 1000 ng/mL	Concentration (ng/mL)
Ketamine	1,000
Norketamine	1,000
Dextromethorphan	500
Dextrorphan tartrate	500
D-Norpropoxyphene	31,250
Meperidine	12,500
Mephentermine hemisulfate salt	15,625
D-Methamphetamine	12,500
3,4-Methylenedioxy-N-ethylamphetamine (MDEA)	25,000
Nordoxepin hydrochloride	25,000
Phencyclidine	5,000
Promazine	8,000
Promethazine	25,000

**LSD**

Drug - Cut-off 10 ng/mL	Concentration (ng/mL)
Lysergic Acid Diethylamide (LSD)	10
Fentanyl	50
Norfentanyl	800

**MDA**

Drug – Cut-off 500 ng/mL	Concentration (ng/mL)
3,4-Methylenedioxyamphetamine (MDA)	500
D-Amphetamine	500
L-Amphetamine	50,000
Paramethoxyamphetamine (PMA)	625
Phentermine	1,250
Tyramine	100,000

**MDMA**

Drug - Cut-off 500 ng/ml	Concentration (ng/ml)
3,4-Methylenedioxymethamphetamine (MDMA)	500
D-Amphetamine	>100,000
L-Amphetamine	>100,000
D-Methamphetamine	>100,000
L-Methamphetamine	>100,000
3,4-Methylenedioxyamphetamine (MDA)	2,500
3,4-Methylenedioxyethylamphetamine (MDEA)	156
Paramethoxyamphetamine (PMA)	50,000
Paramethoxymethamphetamine (PMMA)	100,000

**MDPV**

Drug – Cut-off 500 ng/mL	Concentration (ng/mL)
Methylenedioxypyrovalerone (MDPV)	500

**MET**

Drug – Cut-off 1000 ng/mL	Concentration (ng/mL)
D-Methamphetamine	1,000
(+/-) 3,4-Methylenedioxy-n-ethylamphetamine (MDEA)	10,000
D/L-Methamphetamine	1,000
p-Hydroxymethamphetamine	10,000
D-Amphetamine	>100,000
L-Amphetamine	>100,000
Chloroquine	50,000
(+/-)-Ephedrine	4,000
L-Methamphetamine	10,000
(+/-)3,4-Methylenedioxyamphetamine (MDA)	>100,000
(+/-)3,4-methylenedioxymethamphetamine (MDMA)	1,000
β-Phenylethylamine	7,500
Trimethobenzamide	20,000

Drug – Cut-off 500 ng/mL	Concentration (ng/mL)
D-Methamphetamine	500
(+/-) 3,4-Methylenedioxy-n-ethylamphetamine (MDEA)	5,000

D/L-Methamphetamine	500
p-Hydroxymethamphetamine	5,000
D-Amphetamine	>100,000
L-Amphetamine	>100,000
Chloroquine	40,000
(+/-)-Ephedrine	2,000
L-Methamphetamine	5,000
(+/-)-3,4-Methylenedioxyamphetamine (MDA)	>100,000
(+/-)-3,4-methylenedioxy-methamphetamine (MDMA)	500
β-Phenylethylamine	4,000
Trimethobenzamide	10,000

Drug – Cut-off 300 ng/mL	Concentration (ng/mL)
D-Methamphetamine	300
(+/-) 3,4-Methylenedioxy-n-ethylamphetamine (MDEA)	3,000
D/L-Methamphetamine	300
p-Hydroxymethamphetamine	3,000
D-Amphetamine	>100,000
L-Amphetamine	>100,000
Chloroquine	30,000
(+/-)-Ephedrine	1,500
L-Methamphetamine	3,000
(+/-) 3,4-Methylenedioxyamphetamine (MDA)	>100,000
(+/-) 3,4-methylenedioxy-methamphetamine (MDMA)	300
β-Phenylethylamine	2,500
Trimethobenzamide	6,000

**MOR/OPI**

Drug – Cut-off 2000 ng/mL	Concentration (ng/mL)
Morphine	2,000
Acetylcodeine	1,563
Buprenorphine	25,000
Codeine	500
Diacetylmorphine (Heroin)	1,250
Dihydrocodeine	1,563
Ethylmorphine	800
Hydromorphone	25,000
Hydrocodone	50,000
Merperidine	>100,000
6-Monoacetylmorphine (6-MAM)	1,250
Morphine-3-β-D-glucuronide	12,500
Nalorphine Hydrochloride	>100,000
Oxycodone	>100,000
Oxymorphone	>100,000
Rifampicine	>100,000
Thebaine	50,000

Drug – Cut-off 300 ng/mL	Concentration (ng/mL)
Morphine	300
Acetylcodeine	150
Buprenorphine	3,125
Codeine	250
Diacetylmorphine (Heroin)	250
Dihydrocodeine	586
Ethylmorphine	200
Hydromorphone	12,500
Hydrocodone	12,500
6-Monoacetylmorphine (6-MAM)	250
Morphine-3-β-D-glucuronide	2,500
Nalorphine	25,000
Thebaine	25,000

Drug – Cut-off 100 ng/mL	Concentration (ng/mL)
Morphine	100
Codeine	100
Diacetylmorphine (Heroin)	100
Ethylmorphine	100
Hydromorphone	500
Hydrocodone	500
6-Monoacetylmorphine (6-MAM)	100
Morphine-3-β-D-glucuronide	2,000
Oxycodone	20,000
Oxymorphone	20,000

Promethazine	>100,000
Rifampicine	8,400
Thebaine	8,400

**MPD**

Drug – Cut-off 150 ng/mL	Concentration (ng/mL)
Methylphenindate	150
Ritalinic Acid	5,000

**MQL**

Drug – Cut-off 300 ng/mL	Concentration (ng/mL)
Methaqualone	300
Amitriptyline	50,000
Carbamazepine	20,000
Nortriptyline	50,000
Phenytoin	40,000
Theophylline	40,000

**MTD**

Drug – Cut-off 300 ng/ml	Concentration (ng/ml)
Methadone	300
(-)-α-Methadol	2,000

**OXY**

Drug – Cut-off 100 ng/ml	Concentration (ng/ml)
Oxycodone	100
Hydrocodone	25,000
Hydromorphone	50,000
Naloxone	50,000
Oxymorphone	250

**PCM**

Drug – Cut-off 5000 ng/mL	Concentration (ng/mL)
Acetaminophen (Paracetamol)	5,000
Acetaminophen-β-D-glucuronide	2,000
Acetophenetidine	7,500

**PCP**

Drug – Cut-off 25 ng/mL	Concentration (ng/mL)
Phencyclidine	25
Hydrocodone	12,500
Hydromorphone	6,250
4-Hydroxyphencyclidine	12,500

**PGB**

Drug – Cut-off 500 ng/mL	Concentration (ng/mL)
Pregabalin	500
Gabapentin	>20,000

**PPX**

Drug – Cut-off 300 ng/mL	Concentration (ng/mL)
D-Propoxyphene	300
D-Norpropoxyphene	50,000

**SPC/K2**

Drug – Cut-off 50 ng/mL	Concentration (ng/mL)
JWH 073 4-butanoic acid	50
JWH 018 5-pentanoic acid	50
JWH 018N-(4-hydroxypentyl)	300
JWH 073 4-hydroxybutyl	300
JWH 250 5-hydroxypentyl	>10,000

**TCA**

Drug – Cut-off 1000 ng/mL	Concentration (ng/mL)
Nortriptyline	1,000
Amitriptyline	1,500
Clomipramine	100,000
Cyclobenzaprine	12,500
Desipramine	188
Doxepin	2,000
Imipramine	2,500
Maprotiline	750
Nordoxepin	500
Opipramol	1,563
Promazine	1,000

Promethazine	6,250
Prothipendyl	25,000
Protryptiline	6,250
Prozine	1,250
Trimipramine	100,000

Drug – Cut-off 500 ng/mL	Concentration (ng/mL)
Nortriptyline	500
Amitriptyline	1,500
Clomipramine	100,000
Cyclobenzaprine	10,000
Desipramine	150
Doxepin	1,000
Imipramine	1,500
Maprotiline	500
Nordoxepin	500
Opi Pramol	1,000
Promethazine	5,000
Prothipendyl	20,000
Protryptiline	5,000
Prozine	625
Trimipramine	100,000

Drug – Cut-off 300 ng/mL	Concentration (ng/mL)
Nortriptyline	300
Amitriptyline	1,000
Clomipramine	100,000
Cyclobenzaprine	8,000
Desipramine	100
Doxepin	750
Imipramine	1,000
Maprotiline	300
Nordoxepin	300
Opi Pramol	750
Promethazine	3,000
Prothipendyl	15,000
Protryptiline	3,000
Prozine	500
Trimipramine	100,000

**THC**

Drug – Cut-off 500 ng/mL	Concentration (ng/mL)
11-nor- $\Delta^9$ -THC-9-COOH	500
11-nor- $\Delta^8$ -THC-9-COOH	500
$\Delta^8$ -Tetrahydrocannabinol	>50,000
$\Delta^9$ -Tetrahydrocannabinol	>50,000
Cannabinol	>100,000
Cannabidiol	>100,000

Drug – Cut-off 300 ng/mL	Concentration (ng/mL)
11-nor- $\Delta^9$ -THC-9-COOH	300
11-nor- $\Delta^8$ -THC-9-COOH	300
$\Delta^8$ -Tetrahydrocannabinol	>50,000
$\Delta^9$ -Tetrahydrocannabinol	>50,000
Cannabinol	100,000
Cannabidiol	>100,000

Drug – Cut-off 200 ng/mL	Concentration (ng/mL)
11-nor- $\Delta^9$ -THC-9-COOH	200
11-nor- $\Delta^8$ -THC-9-COOH	200
$\Delta^8$ -Tetrahydrocannabinol	50,000
$\Delta^9$ -Tetrahydrocannabinol	50,000
Cannabinol	60,000
Cannabidiol	>100,000

Drug – Cut-off 150 ng/mL	Concentration (ng/mL)
11-nor- $\Delta^9$ -THC-9-COOH	150
11-nor- $\Delta^8$ -THC-9-COOH	150
$\Delta^8$ -Tetrahydrocannabinol	40,000
$\Delta^9$ -Tetrahydrocannabinol	40,000
Cannabinol	50,000
Cannabidiol	>100,000

Drug – Cut-off 50 ng/mL	Concentration (ng/mL)
11-nor- $\Delta^9$ -THC-9-COOH	50
11-nor- $\Delta^8$ -THC-9-COOH	50

11-hydroxy- $\Delta^9$ -Tetrahydrocannabinol	50
$\Delta^8$ -Tetrahydrocannabinol	15,000
$\Delta^9$ -Tetrahydrocannabinol	15,000
Cannabinol	20,000
Cannabidiol	>100,000

Drug – Cut-off 25 ng/mL	Concentration (ng/mL)
11-nor $\Delta^8$ -THC-9-COOH	25
11-nor- $\Delta^9$ -THC-9-COOH	25
$\Delta^8$ -Tetrahydrocannabinol	7,500
$\Delta^9$ -Tetrahydrocannabinol	7,500
Cannabinol	10,000
Cannabidiol	>100,000

**TIL**

Drug - Cut-off 300 ng/mL	Concentration (ng/mL)
Tilidine	300

**TML**

Drug – Cut-off 200 ng/mL	Concentration (ng/mL)
Tramadol	200
(+)Chlorpheniramine	>100,000
(±)Chlorpheniramine	>100,000
Dimenhydrinate	>100,000
Diphenhydramine	>100,000
Phencyclidine	>100,000

Drug – Cut-off 100 ng/mL	Concentration (ng/mL)
Tramadol	100
(+)-Chlorpheniramine	100,000
(±)Chlorpheniramine	50,000
Dimenhydrinate	50,000
Diphenhydramine	50,000
Phencyclidine	50,000

**TZD**

Drug – Cut-off 25 ng/mL	Concentration (ng/mL)
Trazodone	25

**UR-144/K4**

Drug – Cut-off 25 ng/mL	Concentration (ng/mL)
UR-144 5-Pentanoic acid metabolite	25
UR-144 4-hydroxypentyl	50
UR-144 5-hydroxypentyl	50
UR-144	>10,000
XLR-11	>10,000
AB- PINACA	>10,000
AB-PINACA 5-Pentanoic	>10,000
AB-PINACA 5-hydroxypentyl	>10,000
AB- FUBINACA	>10,000
AB-PINACA 4-hydroxypentyl	>10,000
APINACA	>10,000
APINACA 5-hydroxypentyl	>10,000
ADB-PINACA N-(5-hydroxypentyl)	>10,000
ADB-PINACA Pentanoic Acid	>10,000
5-fluoro AB-PINACA N-(4-hydroxypentyl)	>10,000

**ZAL**

Drug – Cut-off 100 ng/mL	Concentration (ng/mL)
Zaleplon	100

**ZOL**

Drug – Cut-off 25 ng/mL	Concentration (ng/mL)
Zolpidem phenyl-4-carboxylic acid	25
Zolpidem	>10,000

**ZOP**

Drug – Cut-off 50 ng/mL	Concentration (ng/mL)
N-Desmethylzopiclone	50
Zopiclone-N-oxide	50
Zopiclone	300

With exception of the respective parameters positive reacting drugs and drug metabolites, which are listed above, all below listed compounds react negatively up to a concentration of 100 µg/mL.

(-)-Ephedrine (except MET)	Acetone	Aspirin
Chlorpheniramine	Erythromycin	Hemoglobin
Oxalic Acid	Protonix	Tyramine
(+)-Naproxen	Albumin	Benzocaine
Creatine	Ethanol	Ibuprofen
Penicillin-G	Pseudoephedrine	Vitamin C (Ascorbic Acid)
(+/-)-Ephedrine (except MET)	Amitriptyline (except TCA)	Bilirubin
Dextromethorphan	Furosemide	Imipramine (except TCA)
Pheniramine	Quinidine	b-Phenylethyl-amine
4-Dimethylamino-antirine	Ampicillin	Isoproterenol
Dextrorphan tartrate	Glucose	Caffeine
Phenothiazine	Ranitidine	Lidocaine
Acetaminophen (except PCM)	Aspartame	Chloroquine
Dopamine	Guaiacol Glyceryl Ether	Methadone (except MTD)
Procaine	Sertraline	

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### Analytical Sensitivity

A drug-free urine pool was spiked with drugs to target concentrations of +100% cut-off, ± 50% cut-off and ± 25% cut-off and tested with the nal von minden Drug-Screen® single tests (urine). Unless otherwise specified, 30 test cassettes and 30 test strips were each tested. The results demonstrate >99% accuracy at ± 50% cut-off:

Drug Conc. (Cut-off range)	ACL200*		AMP1000		AMP500		AMP300	
	-	+	-	+	-	+	-	+
0% Cut-off	30	0	60	0	60	0	60	0
-50% Cut-off	30	0	60	0	60	0	60	0
-25% Cut-off	25	5	47	13	47	13	49	11
Cut-off	5	25	28	32	21	39	25	35
+25% Cut-off	3	27	6	54	6	54	7	53
+50% Cut-off	0	30	0	60	0	60	0	60
+100% Cut-off	0	30	0	60	0	60	0	60

\*ACL200 results from test strips only

Drug Conc. (Cut-off range)	BAR300		BAR200*		BUP10**		BUP5	
	-	+	-	+	-	+	-	+
0% Cut-off	60	0	30	0	180	0	60	0
-50% Cut-off	60	0	30	0	180	0	60	0
-25% Cut-off	47	13	30	0	156	24	46	14
Cut-off	40	20	5	25	96	84	29	31
+25% Cut-off	15	45	1	29	48	132	24	36
+50% Cut-off	0	60	2	28	0	180	0	60
+100% Cut-off	0	60	0	30	0	180	0	60

\*BAR200 results from test strips only

\*\*BUP10 n = 90 test strips and test cassette, respectively

Drug Conc. (Cut-off range)	BZD300		BZD200		BZD100		CAT100	
	-	+	-	+	-	+	-	+
0% Cut-off	60	0	60	0	60	0	60	0
-50% Cut-off	60	0	60	0	60	0	60	0
-25% Cut-off	53	7	52	8	46	14	55	5
Cut-off	23	37	22	38	22	38	26	34
+25% Cut-off	8	52	10	50	10	50	3	57
+50% Cut-off	0	60	0	60	0	60	0	60
+100% Cut-off	0	60	0	60	0	60	0	60

Drug Conc. (Cut-off range)	COC300		COC200		COC100		COT1000*	
	-	+	-	+	-	+	-	+
0% Cut-off	60	0	60	0	60	0	30	0
-50% Cut-off	60	0	60	0	60	0	30	0
-25% Cut-off	60	0	46	14	46	14	25	5
Cut-off	13	47	15	45	14	46	7	23
+25% Cut-off	7	53	5	55	5	55	1	29
+50% Cut-off	0	60	0	60	0	60	0	30
+100% Cut-off	0	60	0	60	0	60	0	30

\*COT1000 results from test cassettes only

Drug Conc. (Cut-off range)	COT200*		EDDP100		FYL10		KET1000	
	-	+	-	+	-	+	-	+
0% Cut-off	180	0	60	0	60	0	60	0
-50% Cut-off	180	0	60	0	60	0	60	0
-25% Cut-off	180	0	46	14	50	10	60	0
Cut-off	126	54	26	34	20	40	36	24
+25% Cut-off	80	100	14	46	14	46	2	58
+50% Cut-off	32	148	0	60	0	60	0	60
+100% Cut-off	0	180	0	60	0	60	0	60

\*COT200 n = 90 test strips and test cassette, respectively

Drug Conc. (Cut-off range)	LSD10*		MDA500		MDMA500		MDPV500	
	-	+	-	+	-	+	-	+
0% Cut-off	100	0	60	0	60	0	60	0
-50% Cut-off	100	0	60	0	60	0	60	0
-25% Cut-off	100	0	46	14	49	11	40	20
Cut-off	36	64	16	44	32	28	4	56
+25% Cut-off	0	100	6	54	8	52	8	52
+50% Cut-off	0	100	0	60	0	60	0	60
+100% Cut-off	0	100	0	60	0	60	0	60

\*LSD10 n = 50 test strips and test cassette, respectively

Drug Conc. (Cut-off range)	MET1000		MET500		MET300		MOR2000	
	-	+	-	+	-	+	-	+
0% Cut-off	60	0	60	0	60	0	60	0
-50% Cut-off	60	0	60	0	60	0	60	0
-25% Cut-off	54	6	54	6	50	10	60	0
Cut-off	36	24	26	34	27	33	18	42
+25% Cut-off	2	58	11	49	8	52	8	52
+50% Cut-off	0	60	0	60	0	60	0	60
+100% Cut-off	0	60	0	60	0	60	0	60

Drug Conc. (Cut-off range)	MOR300		MOR100		MPD150		MQL300	
	-	+	-	+	-	+	-	+
0% Cut-off	60	0	60	0	60	0	60	0
-50% Cut-off	60	0	60	0	60	0	60	0
-25% Cut-off	53	7	46	14	38	22	54	6
Cut-off	37	23	53	7	7	53	22	38
+25% Cut-off	4	56	12	48	3	57	10	50
+50% Cut-off	0	60	0	60	0	60	0	60
+100% Cut-off	0	60	0	60	0	60	0	60

Drug Conc. (Cut-off range)	MTD300		OXY100		PCM5000		PCP25	
	-	+	-	+	-	+	-	+
0% Cut-off	60	0	60	0	60	0	60	0
-50% Cut-off	59	1	60	0	60	0	60	0
-25% Cut-off	50	10	46	14	18	42	45	15
Cut-off	41	19	26	34	6	54	42	18
+25% Cut-off	5	55	14	46	4	56	14	46
+50% Cut-off	0	60	0	60	0	60	0	60
+100% Cut-off	0	60	0	60	0	60	0	60

Drug Conc. (Cut-off range)	PGB500		PPX300		SPC/K2 50		TCA1000	
	-	+	-	+	-	+	-	+
0% Cut-off	60	0	60	0	60	0	60	0
-50% Cut-off	60	0	58	2	60	0	60	0
-25% Cut-off	49	11	48	12	18	42	47	13
Cut-off	3	57	42	18	6	54	29	31
+25% Cut-off	3	57	4	56	4	56	8	52
+50% Cut-off	0	60	0	60	0	60	0	30
+100% Cut-off	0	60	0	60	0	60	0	30

Drug Conc. (Cut-off range)	TCA500		TCA300		THC500		THC300	
	-	+	-	+	-	+	-	+
0% Cut-off	60	0	60	0	60	0	60	0
-50% Cut-off	60	0	60	0	60	0	60	0
-25% Cut-off	49	11	49	11	36	24	51	9
Cut-off	15	45	18	42	21	39	22	38
+25% Cut-off	9	51	7	53	6	54	5	55
+50% Cut-off	0	60	0	60	0	60	0	60
+100% Cut-off	0	60	0	60	0	60	0	60

Drug Conc. (Cut-off range)	THC200		THC150		THC50		THC25	
	-	+	-	+	-	+	-	+
0% Cut-off	60	0	60	0	60	0	60	0
-50% Cut-off	60	0	60	0	60	0	60	0
-25% Cut-off	23	37	31	29	22	38	22	38
Cut-off	17	43	17	43	16	44	16	44
+25% Cut-off	7	53	5	55	4	56	4	56
+50% Cut-off	0	60	0	60	0	60	1	59
+100% Cut-off	0	60	0	60	0	60	0	60

Drug Conc. (Cut-off range)	TIL300		TML200		TML100		TZD25	
	-	+	-	+	-	+	-	+
0% Cut-off	60	0	60	0	60	0	60	0
-50% Cut-off	60	0	60	0	60	0	60	0
-25% Cut-off	33	27	46	14	50	10	47	13
Cut-off	3	57	19	41	28	32	9	51
+25% Cut-off	5	55	7	53	12	48	5	55
+50% Cut-off	0	60	0	60	0	60	0	60
+100% Cut-off	0	60	0	60	0	60	0	60

Drug Conc. (Cut-off range)	UR-144 25		ZAL100		ZOL25		ZOP50	
	-	+	-	+	-	+	-	+
0% Cut-off	60	0	60	0	60	0	60	0
-50% Cut-off	60	0	60	0	60	0	60	0
-25% Cut-off	54	6	40	20	19	41	36	24
Cut-off	20	40	7	53	9	51	20	40
+25% Cut-off	4	56	7	53	4	56	10	50
+50% Cut-off	0	60	0	60	0	60	0	60
+100% Cut-off	0	60	0	60	0	60	0	60

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Parameter	Reference Method	Positive Agreement	Negative Agreement	Overall Agreement
COC 100	GC/MS	93%	96%	95%
COT 1000 <sup>2</sup>	GC/MS	>99%	>99%	>99%
COT 200	GC/MS	>99%	94%	96%
EDDP 100	GC/MS	96%	97%	97%
FYL 10	Other Rapid Test	>99%	>99%	>99%
KET 1000	GC/MS	99%	94%	96%
LSD 10	GC/MS	96%	>99%	98%
MDA 500	GC/MS	>99%	>99%	>99%
MDMA 500	GC/MS	>99%	98%	99%
MDPV 500	GC/MS	>99%	>99%	>99%
MET 1000	GC/MS	99%	94% (strip) 93% (cas)	96%
MET 500	GC/MS	98%	98%	98%
MET 300	GC/MS	94%	92%	92%
MOR/OPI 2000	GC/MS	>99%	90%	95%
MOR/OPI 300	GC/MS	>99%	94%	97%
MOR/OPI 100	GC/MS	97%	97%	97%
MPD 150	GC/MS	98%	98%	98%
MQL 300	GC/MS	97%	96%	97%
MTD 300	GC/MS	99%	94%	96%
OXY 100	GC/MS	98%	97%	97%
PCM 5000	GC/MS	96%	>99%	98%
PCP 25	GC/MS	>99%	97%	98%
PGB 500	GC/MS	>99%	>99%	>99%
PPX 300	GC/MS	99%	94%	96%
SPC/K2 50	GC/MS	>99%	>99%	>99%
TCA 1000	GC/MS	>99%	89%	91%
TCA 500	GC/MS	>99%	>99%	>99%
TCA 300	GC/MS	>99%	>99%	>99%
THC 500	GC/MS	>99%	>99%	>99%
THC 300	GC/MS	>99%	>99%	>99%
THC 200	GC/MS	96%	>99%	98%
THC 150	GC/MS	97%	88%	91%
THC 50	GC/MS	>99%	>99%	>99%
THC 25	GC/MS	98%	88%	92%
TIL 300	GC/MS	97%	98%	97%
TML 200	GC/MS	>99%	>99%	>99%
TML 100	GC/MS	97%	98%	97%
TZD 25	GC/MS	98%	>99%	99%
UR-144/K4 25	GC/MS	>99%	>99%	>99%
ZAL 100	GC/MS	>99%	>99%	>99%
ZOL 25	GC/MS	98%	98%	98%
ZOP 50	GC/MS	>99%	>99%	>99%

<sup>1</sup>: only strip format tested

<sup>2</sup>: only cassette format tested

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### Clinical Performance

The clinical performance of the nal von minden Drug-Screen® rapid tests (urine) were specified by using urine specimens for which the drug concentration had been determined with GC/MS LC/MS or another rapid test. All nal von minden Drug-Screen® rapid tests showed a good performance against the respective reference method. Overall agreement was ≥ 90% for all parameters, for the majority even ≥ 95%. The following table gives a summary of the study results. Unless mentioned otherwise, identical result were obtained for strip and cassette format. Values were rounded.

Parameter	Reference Method	Positive Agreement	Negative Agreement	Overall Agreement
ACL 200 <sup>1</sup>	GC/MS	98%	> 99%	99%
AMP 1000	GC/MS	97%	95%	96%
AMP 500	GC/MS	98%	98%	98%
AMP 300	GC/MS	96%	95%	95%
BAR 300	GC/MS	92%	98%	95%
BAR 200 <sup>1</sup>	GC/MS	97%	97%	97%
BUP 10	LC/MS	98%	99%	99%
BUP 5	LC/MS	96%	96%	96%
BZD 300	GC/MS	97% (strip) 96% (cas)	95% (strip) 96% (cas)	96%
BZD 200	GC/MS	95%	98%	96%
BZD 100	GC/MS	97%	>99%	98%
CAT 100	GC/MS	99%	>99%	99%
COC 300	GC/MS	96%	90%	93%
COC 200	GC/MS	92% (strip) 94% (cas)	95%	93% (strip) 94% (cas)

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
**nal von minden Drug-Screen® Single/Multi Test**  
(Ref. 101XXX / 102XXX / 103XXX / 104 XXX / 105XXX / 11600XX / 62XXXX /  
63XXXX / 64XXXX)

**INTERNATIONAL**





Symbol	Deutsch	English	Français	Español	Italiano	Polski
	CE Konformitätszeichen	CE marking of conformity	Conformité aux normes européennes	Conformidad europea	Conformità europea	Znak zgodności CE
	Gebrauchsanweisung beachten	Consult instructions for use	Consulter la notice d'utilisation	Consúltense las instrucciones de uso	Consultare le istruzioni per l'uso	Przestrzegać instrukcji obsługi
	In-vitro-Diagnostika	In-vitro diagnostic medical device	Dispositif médical de diagnostic in vitro	Producto sanitario para diagnóstico in vitro	Dispositivo medico- diagnostico in vitro	Tylko do diagnostyki in vitro
	Temperaturbegrenzung	Temperature limitation	Limites de tempéra- ture	Limitación de temperatura	Limiti di temperatura	Temperatura przechowywania
	Chargenbezeichnung	Batch code	Code du lot	Código de lote	Codice lotto	Numer serii
	Nicht zur Wiederver- wendung	Do not reuse	Ne pas réutiliser	No reutilizar	Non riutilizzare	Tylko do jednorazo- wego użytku
	Verwendbar bis	Use by	Utiliser jusqu'au	Fecha de caducidad	Utilizzare entro	Data ważności
	Bestellnummer	Catalogue Number	Référence du catalogue	Número de catálogo	Riferimento di Catalogo	Numer katalogowy
	Hersteller	Manufacturer	Fabricant	Fabricante	Fabbricante	Producent
	Ausreichend für <n> Ansätze	Sufficient for <n> tests	Suffisant pour pour "n" tests	Válido para para <n> ensayos	Sufficiente per "n" saggi	Wystarczający na <n> Powtórzeń

Symbol	Português	Český	Suomi	Svenskt	Nederlands	Dansk
	Conformidade com as normas europeias	CE certifikát	CE-merkitty	CE-märkning	CE-markering	CE-mærkning
	Consultar as instruções de utilização	Viz návod k použití	Katso käyttöohjetta	Läs bruksanvisningen	Raadpleeg de gebruiksaanwijzing	Se brugsanvisningen
	Dispositivo médico para diagnóstico in vitro	Diagnostický zdravotnický prostředek in vitro	In vitro - diagnostiikkaan tarkoitettu lääkinnällinen laite	Medicinteknisk produkt avsedd för in vitro- diagnostik	Medisch hulpmiddel voor in- vitrodiagnostiek	Medicinsk udstyr til in vitro-diagnostik
	Limites de tempera- tura	Teplotní omezení	Lämpötilarajat	Temperaturbegränsning	Temperatuurlimiet	Temperaturbegrænsning
	Código do lote	Kód šarže	Eräkoodi	Satsnummer	Code van de partij	Batchkode
	Não reutilizar	Pro jednorázové použití	Kertakäyttöinen	Får inte återanvändas	Niet opnieuw gebruiken	Må ikke genbruges
	Prazo de validade	Spotřebujte do	Käytettävä viimeistään	Används före	Houdbaar tot	Udløbsdato
	Número de catálogo	Katalogov číslo	Luettelonumero	Listnummer	Catalogus nummer	Bestil lingsnummer
	Fabricante	Výrobce	Valmistaja	Tillverkare	Fabrikant	Fabrikant
	Suficiente para <n> test	Dostačuje pro <n> testů	Lukumäärä <n> test	Räcker till <n> test	Volgende voor <n> test	Tilstrækkeligt til <n> test

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