



Are they abusing?

RTL's most popular laboratory drug test is also cost-effective, fast and legally defensible. *We'll find out.*

SELECT FROM A WIDE RANGE OF URINE LABORATORY TEST PANEL OPTIONS THAT SUIT YOUR NEEDS.

Redwood Toxicology Laboratory (RTL) combines vital expertise with industry-standard test methodologies to ensure you receive accurate results and extensive service quickly—helping you to maintain an effective test program. RTL offers hundreds of lab-based test options, in many urine panel configurations.

Our professional toxicologists perform screening and confirmation with state-of-the-art technology and equipment. After initial screening for presumptive positives, we quantitatively confirm by thin layer chromatography (TLC), radioimmunoassay (RIA), gas chromatography (GC), gas chromatography/mass spectrometry (GC/MS), or Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS).

popular urine lab tests — test panels include creatinine and THC/creatinine ratio screens

Urine 5 Panel <small>H39</small>	Urine 8 Panel <small>R53</small>	Urine 10 Panel <small>R57</small>
AMP / COC / OPI / PCP / THC	ALC / AMP / BAR / BZO / COC / OPI / PCP / THC	ALC / AMP / BAR / BZO / COC / MTD / OPI / PCP / PPX / THC

Expand panels to include: EtG/EtS, synthetic cannabinoids, designer stimulants, and more.

FEATURES AND BENEFITS

- Urine screening and confirmation with fast, accurate results
- Wide range of drug test panels available
- Lab analysis provides confirmative evidence of use and defensible results
- Fast turn-around time from receipt of specimen (24 hours¹ negative, 48-72 hours positive)
- Toll-free customer support services with access to board certified toxicologists
- Numerous report options available including, web-based test management solution for all clients

Start testing for drugs of abuse

800-255-2159

or visit: www.redwoodtoxicology.com



FREQUENTLY ASKED QUESTIONS

Complete list of FAQs available online at www.redwoodtoxicology.com**How do I collect the urine and send in a specimen?**

Collection and shipping guidelines are included in the RTL Reference Guide. A copy is provided with your new account supplies. Please read these instructions carefully. RTL also offers telephonic training and client service support.

How long does it take for results?

Results are typically reported in 24 hours¹ for negatives, 48-72 hours for positives. All presumptive positive results go through a confirmation process to ensure accurate results.

What methodology does RTL use to perform initial screening?

RTL screens urine specimens by enzyme immunoassay (EIA). An immunoassay is a test that uses antibodies to detect the presence of drugs and other substances in urine. The initial screening process does not measure the specific amount of drug present in urine samples. It provides either a positive or negative result, indicating the presence or absence of detectable drug.

Screening Cut-off Levels by EIA

Drug	EIA
Amphetamines	500/1000 ng/mL
Methamphetamine	1000 ng/mL
Barbiturates	200 ng/mL
Benzodiazepines	200 ng/mL
Buprenorphine	5 ng/mL
Cocaine Metabolite (Benzoyllecgonine)	150/300 ng/mL
Ethanol (Alcohol Metabolite)	0.04 gm/dL
Methadone	150 ng/mL
Methadone Metabolite (EDDP)	150 ng/mL
Methaqualone	300 ng/mL
Opiates (Morphine and Codeine)	300 ng/mL
Oxycodone	300 ng/mL
Phencyclidine (PCP)	25 ng/mL
Propoxyphene	300 ng/mL
THC (Cannabinoids)	20/50 ng/mL ²

What testing methodology does RTL use for confirmations?

Confirmations are available by thin layer chromatography (TLC), radioimmunoassay (RIA), gas chromatography (GC), gas chromatography/mass spectrometry (GC/MS) and liquid chromatography/mass spectrometry/mass spectrometry (LC/MS/MS). GC/MS and/or LC/MS/MS is used to confirm presumptive positive drug screen specimens obtained from RTL's instant on-site screening devices.

Confirmation Cut-off Levels by Procedure

Drug	TLC	RIA	GC/MS	LC/MS/MS
Alcohol (Ethanol)			.02 gm/dL (GC-FID) ³	
Amphetamines				
- Amphetamine/Methamphetamine/MDMA & MDA	<500 ng/mL		250 ng/mL	
Barbiturates	<500 ng/mL		200 ng/mL	
Benzodiazepines		200 ng/mL		50 ng/mL
Buprenorphine			0.5 ng/mL	
Cocaine⁴		150 ng/mL	100 ng/mL	
EtG				100 ng/mL
EtS				25 ng/mL
Fentanyl			5 ng/mL	
GHB			10 mcg/mL	
Marijuana Metabolite (THC-COOH)		25 ng/mL		5 ng/mL
Methadone	<500 ng/mL		100 ng/mL	
Methaqualone	<500 ng/mL			
Opiates				
- Total Morphine/Codeine	<500 ng/mL			100 ng/mL
- 6-Monoacetylmorphine				5 ng/mL
- Hydrocodone/Hydromorphone	1000 ng/mL			100 ng/mL
- Oxycodone	1000 ng/mL			50 ng/mL
- Noroxycodone				50 ng/mL
Phencyclidine (PCP)			10 ng/mL	
Propoxyphene	<500 ng/mL		200 ng/mL	
Tricyclic Antidepressants				
- Amitriptyline/Desipramine/Imipramine/Nortriptyline/Maprotiline			50 ng/mL	
- Doxepine			100 ng/mL	

Why are screening & confirmation cut-off levels different?

Screening and confirmation testing are performed using different methodologies that require separate cut-off levels. The immunoassay tests used to perform initial drug screens are designed to detect a wide range of chemically similar compounds that react with antibodies which are at the core of the chemistry making up the tests. In contrast, GC/MS and LC/MS/MS confirmatory testing detects specific metabolites that provide identification and quantification of a specific drug.

1. Excludes specimens received Saturday

2. Agency has the ability to choose cut-off levels indicated.

3. Test performed by Gas Chromatography Flame Ionization Detection (GC/FID)

4. Cocaine Metabolite Benzoyllecgonine