Each test in the test panel contains mouse monoclonal antibody-coated particles and corresponding drug- 
protein conjugates. A goat antibody is employed in each control line.

- For medical and other professional in vitro diagnostic use only. Do not use after the expiration date.
- The test panel should remain in the sealed pouch until use.
- All specimens should be considered potentially hazardous and handled in the same manner as an infectious
  agent.
- The used test panel must be discarded according to local regulations.

### Storage and Stability

Store as packaged in the sealed pouch either at room temperature or refrigerated (2-30°C). The test panel is
stable through the expiration date printed on the sealed pouch. The test panel must remain in the sealed pouch
until use. DO NOT FREEZE. Do not use beyond the expiration date.

### Specimen Collection and Preparation

- **Mini-Strip**
  - The urine specimen must be collected in a clean and dry container. Urine collected at any time of the day may be
  used. Urine specimens exhibiting visible precipitates should be centrifuged, filtered, or allowed to settle to
  obtain a clear supernatant for testing.

- **Materials Provided**
  - Specimen collection container
  - **Materials Required But Not Provided**
  - Test panels

### DIRECTIONS FOR USE

- **Allow the test panel, urine specimen, and/or controls to equilibrate to room temperature (15-30°C) prior to
  testing.**
- 1. Bring the pouch to room temperature before opening it. Remove the test panel from the sealed pouch
  and use it as soon as possible.
- 2. Take off the cap at the end of the test. With arrows pointing toward the urine specimen, immerse the test
  panel vertically into the urine specimen for at least 10-15 seconds. Immers the test panel to at least the level of
  the arrow lines on the strip(s). Do not pass the arrows on the test panel when immersing the panel. See
  the illustration below.
- 3. Place the test panel on a non-absorbent flat surface, start the timer and wait for the colored line(s) to appear.

### Test Results

<table>
<thead>
<tr>
<th>Drug</th>
<th>Specimen Cut-off (ng/mL)</th>
<th>Result of Test Line (CL)</th>
<th>Control Line (C)</th>
<th>Invalid</th>
<th>Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMP</td>
<td>100</td>
<td>-</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COD</td>
<td>500</td>
<td>-</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MOP</td>
<td>2,000</td>
<td>-</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AMP (500)</td>
<td>300</td>
<td>-</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BAR</td>
<td>300</td>
<td>-</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BZO (500)</td>
<td>300</td>
<td>-</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTD</td>
<td>300</td>
<td>-</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTD (500)</td>
<td>300</td>
<td>-</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTD (1,000)</td>
<td>300</td>
<td>-</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TCA</td>
<td>500</td>
<td>-</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TCA (500)</td>
<td>300</td>
<td>-</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TCA (1,000)</td>
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<td>-</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MDA5</td>
<td>500</td>
<td>-</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MDA5 (500)</td>
<td>500</td>
<td>-</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MDA5 (1,000)</td>
<td>500</td>
<td>-</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OPI (1000)</td>
<td>300</td>
<td>-</td>
<td>+</td>
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</tr>
<tr>
<td>OPI</td>
<td>300</td>
<td>-</td>
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<tr>
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<td>+</td>
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</tr>
<tr>
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</tr>
<tr>
<td>OPI (50)</td>
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<td>-</td>
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</tr>
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<td>OPI (10)</td>
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<td>-</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OPI (5)</td>
<td>5</td>
<td>-</td>
<td>+</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### PERFORMANCE CHARACTERISTICS

A side-by-side comparison was conducted using the Multi-Drug One Step Screen Test Panel (Urine) and commercially available drug rapid tests. Testing was performed on approximately 300 specimens previously collected from Drug Screening Testing. Positivity response rates were confirmed by GCMS. The following results were tabulated:

**NOTE: BUP was compared to the reversed scale for comparison testing.**

<table>
<thead>
<tr>
<th>Drug</th>
<th>Specimen Cut-off (ng/mL)</th>
<th>Positive Response Rate (%)</th>
<th><strong>NOTE: TCA was based on HPLC data instead of GCMS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>AMP</td>
<td>100</td>
<td>99%</td>
<td></td>
</tr>
<tr>
<td>OPI</td>
<td>300</td>
<td>99%</td>
<td></td>
</tr>
<tr>
<td>BZO</td>
<td>300</td>
<td>99%</td>
<td></td>
</tr>
<tr>
<td>MTD</td>
<td>300</td>
<td>99%</td>
<td></td>
</tr>
<tr>
<td>MDA5</td>
<td>500</td>
<td>99%</td>
<td></td>
</tr>
<tr>
<td>OPI</td>
<td>500</td>
<td>99%</td>
<td></td>
</tr>
<tr>
<td>OPI</td>
<td>1000</td>
<td>99%</td>
<td></td>
</tr>
<tr>
<td>OPI</td>
<td>100</td>
<td>99%</td>
<td></td>
</tr>
<tr>
<td>OPI</td>
<td>50</td>
<td>99%</td>
<td></td>
</tr>
<tr>
<td>OPI</td>
<td>10</td>
<td>99%</td>
<td></td>
</tr>
</tbody>
</table>

A drug-free urine pool was spiked with drugs to the concentrations at ±50% cut-off and ±25% cut-off. The results are summarized below.
The following tables list the concentration of compounds (ng/mL) that are detected positive in urine by the Multi-Drog One Step Screen Test Panel (Urine) at 5 μM.

### AMPHETAMINE

- **Amphetamine**: 100,000
- **β-aminopropiophenone**: 3,000
- **Cocaine**: 50,000
- **Methamphetamine**: 10,000
- **3,4-Methylenedioxamphetamine (MDMA)**: 2,500

### BARBITURATES

- **Barbiturate**: 100,000
- **Butabarbital**: 500
- **Ethylbarbiturate**: 5,125
- **Methylphenidate**: 50,000
- **Phenobarbital**: 100,000
- **Phenoperidine**: 500
- **Phenylbutazone**: 25,000

### BENZODIAZEPINES

- **Flunitrazepam**: 2,500
- **Midazolam**: 75,000
- **Oxazepam**: 2,000
- **Temazepam**: 12,500

### BENZYL NICOTINIC AMINE

- **1-Benzylpiperazine**: 500

### COCAINE

- **Cocaethylene**: 500
- **Ecgonine methyl ester**: 150
  - **Hydroxycocaethylene**: 300
- **3,4-Methylenedioxycocaine**: 150
- **Norscopolamine**: 150

### MARIJUANA

- **Cannabinol**: 150
- **Delta-9-tetrahydrocannabinol (THC)**: 5,000
  - **Cortisone**: 2,000
  - **Corticosterone**: 10,000

### OPIOIDS

- **Codeine**: 100
- **Heroin**: 10,000
- **Hydrocodone**: 100
- **Methadone**: 1,000
- **Morphine**: 500
- **Oxycodone**: 1,000
- **Oxymorphone**: 1,000
- **Phenylpropanolamine (d,l-phellodendrine)**: 1,000
  - **Phentolamine**: 1,000

### PHENETHYLAMINE

- **3,4-Dihydroxyphenylethylamine**: 100
- **3,4-Dihydroxymethamphetamine (MDMA)**: 1,000
- **3,4-Dimethoxyamphetamine**: 1,000
- **3,4-Dimethoxyphenetidine**: 1,000
- **3,4-Methylenedioxyamphetamine**: 1,000
- **3,4-Methylenedioxy-N,N-dimethylaniline**: 1,000
- **3,4-Methylenedioxy-N,N-dimethylaniline (MDMA)**: 2,000
- **3,4-Methylenedioxyamphetamine (MDMA)**: 2,000

### PROPOXYPHENE

- **Propoxyphene**: 500

### Tryptamine

- **L-DOPA**: 500
- **5-Hydroxytryptamine (5-HT)**: 500
- **5-Hydroxytryptophan (5-HTP)**: 500
- **Norepinephrine**: 150
- **Oxytocin**: 150
- **Serotonin**: 150
- **Substance P**: 150
- **Vasoactive intestinal polypeptide (VIP)**: 150

### TRICYCLIC ANTIDEPRESSANTS

- **Amitriptyline**: 500
- **Clomipramine**: 500
- **Dothiepin**: 500
- **Nortriptyline**: 500
- **Protriptyline**: 500
- **Trimipramine**: 500

### Tryptamine analogues

- **1-Benzylpiperazine**: 500
  - **Cortisone**: 2,000
  - **Corticosterone**: 10,000

BIBLIOGRAPHY

2. Baselt RC. *Disposition of Toxic Drugs and Chemicals in Man*. 2nd Ed. Biomedical Publ., Davis, CA, 1982; 488