

# HPLC Application

ID No.: 25864

## Fast Screening Method for 86 Forensic Analytes in Human Urine by LC-MS/MS

**Column:** Luna® 5 µm C18(2) 100 Å, LC Column 50 x 2 mm, Ea

**Dimensions:** 50 x 2 mm ID

**Order No:** 00B-4252-B0

**Elution Type:** Gradient

**Eluent A:** 5 mM Ammonium formate in water

**Eluent B:** 0.1 % Formic acid in methanol

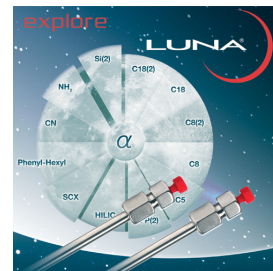
Gradient Profile:	Step No.	Time (min)	Pct A	Pct B
	1	0	95	5
	2	1.8	5	95

**Flow Rate:** 0.2 mL/min

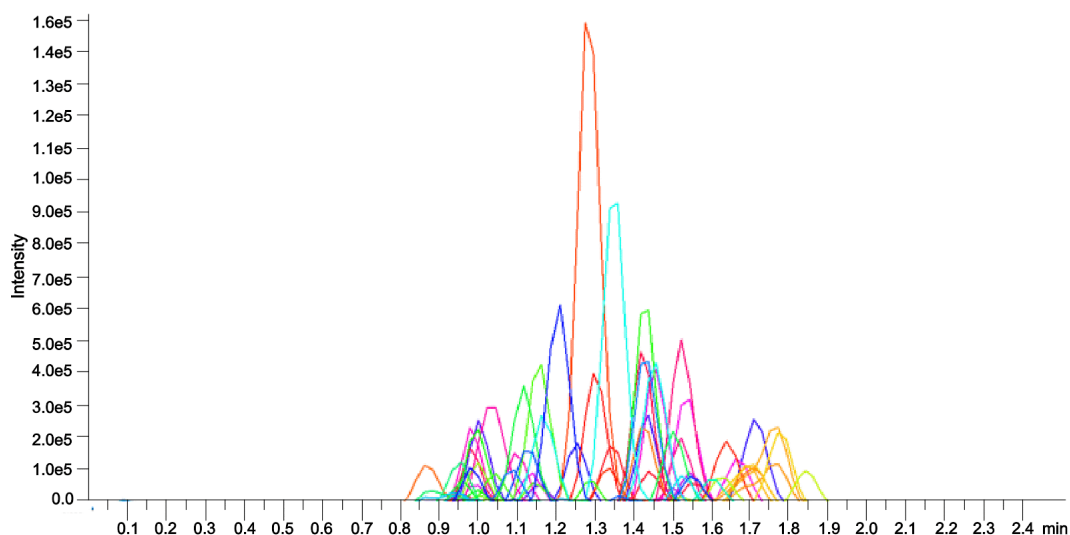
**Col. Temp.:** ambient

**Detection:** LC/MS/MS @ (ambient)

**Analyst Note:** Hydrolyze 100 µL urine by adding 25 µL IMCS RapidHydrolysis Buffer, 20 µL IMCSzyme, and 10 µL IS. All to hydrolyze for 30 to 60 min at 55 °C. After hydrolysis, add 0.8 mL of diluent to the mixture and centrifuge at 21,000 g for 15 min. Transfer supernatant to a glass vial with insert for analysis by LC-MS/MS.



Products used in this application:



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### ANALYTES:

<b>1</b> 6-MAM	<b>41</b> JWH-122 5-OH pentyl	<b>81</b> Ritalinic Acid
<b>2</b> 7-Aminoclonazepam	<b>42</b> JWH-210 5-OH pentyl	<b>82</b> Sufentanil
<b>3</b> 7-Hydroxymitragynine	<b>43</b> JWH-250 4-OH pentyl	<b>83</b> Tapentadol
<b>4</b> Acetyl Fentanyl	<b>44</b> Lorazepam	<b>84</b> Temazepam
<b>5</b> Alpha-Hydroxyalprazolam	<b>45</b> MDA	<b>85</b> Tramadol
<b>6</b> Alpha-Hydroxymidazolam	<b>46</b> MDEA	<b>86</b> Zolpidem
<b>7</b> Alpha-Hydroxytriazolam	<b>47</b> MDMA	
<b>8</b> Alpha-PPP	<b>48</b> MDPV	
<b>9</b> Alpha-PVP	<b>49</b> Meperidine	
<b>10</b> Alprazolam	<b>50</b> Mephedrone	
<b>11</b> AM-2201 4-OH pentyl	<b>51</b> Meprobamate	
<b>12</b> Amitriptyline	<b>52</b> Methadone	
<b>13</b> Amphetamine	<b>53</b> Methamphetamine	
<b>14</b> Benzoylcegonine	<b>54</b> Methedrone	
<b>15</b> Buphedrone	<b>55</b> Methylone	
<b>16</b> Buprenorphine	<b>56</b> Methylphenidate	
<b>17</b> Carisoprodol	<b>57</b> Midazolam	
<b>18</b> Clomipramine	<b>58</b> Mitragynine	
<b>19</b> Codeine	<b>59</b> Morphine	
<b>20</b> Cotinine	<b>60</b> Naloxone	
<b>21</b> Cyclobenzaprine	<b>61</b> Naltrexone	
<b>22</b> Desalkylflurazepam	<b>62</b> N-desmethyltapentadol	
<b>23</b> Desipramine	<b>63</b> Norbuprenorphine	
<b>24</b> Desmethyldoxepin	<b>64</b> Norcodeine	
<b>25</b> Dextromethorphan	<b>65</b> Nordiazepam	
<b>26</b> Diazepam	<b>66</b> Norfentanyl	
<b>27</b> Dihydrocodeine	<b>67</b> Norhydrocodone	
<b>28</b> Doxepin	<b>68</b> Normeperidine	
<b>29</b> EDDP	<b>69</b> Noroxycodone	
<b>30</b> Fentanyl	<b>70</b> Norpropoxyphene	
<b>31</b> Gabapentin	<b>71</b> Nortriptyline	
<b>32</b> Hydrocodone	<b>72</b> O-Desmethyltramadol	
<b>33</b> Hydromorphone	<b>73</b> Oxazepam	
<b>34</b> Imipramine	<b>74</b> Oxycodone	
<b>35</b> JWH-018 4-OH pentyl	<b>75</b> Oxymorphone	
<b>36</b> JWH-018 pentanoic acid	<b>76</b> PCP	
<b>37</b> JWH-019 6-OH hexyl	<b>77</b> Pregabalin	
<b>38</b> JWH-073 3-OH butyl	<b>78</b> Propoxyphene	
<b>39</b> JWH-073 butanoic acid	<b>79</b> Protriptyline	
<b>40</b> JWH-081 5-OH pentyl	<b>80</b> RCS4-4-OH-pentyl	

