

EDDP Specific Urine Assay

Immunalysis and Specialty Diagnostix present a new homogeneous enzyme immunoassay for the detection of the Methadone Metabolite EDDP in urine. This EDDP specific urine assay is a sensitive and reliable method to monitor the compliance of patients in opiate withdrawal programs.

Assay Characteristics

- Highly sensitive and specific method to detect EDDP in human urine samples
- Three distinct cut-offs 100 ng/mL, 300 ng/mL & 1000 ng/mL for qualitative and 100 ng/mL & 300 ng/mL for semi-quantitative analysis
- · Liquid, stable, ready-to-use reagents, calibrators and controls no reconstitution required
- Application protocols available for all major clinical chemistry analyzers
- Packaging tailored to your laboratory's specific needs

Background

Methadone is a synthetic compound originally developed as an alternative to morphine. Its pharmacological properties are similar to heroin and Methadone maintenance is used in the effective treatment of opioid addiction. Its primary metabolite is 2-Ethylidin-1,5-Dimethyl-3,3-Diphenyl-pyrolidine (EDDP).

Testing for EDDP instead of Methadone offers several advantages. The most important of those is that, while methadone renal clearance is dependent on urinary pH, renal clearance of EDDP remains unaffected. An alkaline urine pH > 7 may reduce renal clearance of unmetabolized methadone to such an extent that a urine specimen may not contain enough parent methadone for a positive drug screen. Since a negative test result implies non-compliance, a patient enrolled in a methadone substitution program

would be in serious trouble. An EDDP test will provide positive evidence of the patient's compliance.

If, however, a patient tries to fake compliance by spiking his own urine with a small amount of methadone to cause a positive result for a Methadone assay, testing for EDDP will prove that the patient did not ingest the drug. Moreover, testing for EDDP will also detect those that actually take their methadone dose but try to hide co-consumption of other drugs by presenting someone else's urine sample spiked with a small amount of methadone. EDDP immunoassay detection may be used to either complement or replace the screening for methadone. The new EDDP Specific Urine Assay will not only make compliance testing easier, it will also help to rule out possible tampering with urine samples.





Cross-Reactivity with Related Drugs at 100 ng/mL Cut-off

Analyte	Concentration (ng/mL)	Cross-Reactivity (%)
Chlorpromazine	90 000	0.11
Diphenhydramine	1 000 000	0,01
Doxylamine	1 000 000	0,01
EDDP	100	100
EMDP	1 000 000	0,01
LAAM	1 000 000	0,01
(±)-alpha Methadol	1 000 000	0,01
Methadone	700 000	0,01
(-)-iso Methadone	100 000	< 0.1
Methylphenidate	100 000	0.1

Method Comparison

		LC-MS/MS	
		Positive	Negative
HEIA	Positive	40	0
	Negative	0	40

Ordering Information

Reagents	Size	Order No.
	5.125	0.00
EDDP Specific Urine HEIA	25 mL	349UR-0025
	60 mL	349UR-0060W
	100 mL	349UR-0100
Calibrators		
EDDP Urine Level 1 Calibrator, 100 ng/mL	1 x 5 mL	10015-5
EDDP Urine Level 2 Calibrator, 300 ng/mL	1 x 5 mL	10016-5
EDDP Urine Level 3 Calibrator, 500 ng/mL	1 x 5 mL	10017-5
EDDP Urine Level 4 Calibrator, 1000 ng/mL	1 x 5 mL	10018-5
Controls		
EDDP Urine Control Set 1, 75 / 125 ng/mL	2 x 5 mL	3006-5
EDDP Urine Control Set 2, 225 / 375 ng/mL	2 x 5 mL	3007-5
EDDP Urine Control Set 3, 750 / 1250 ng/mL	2 x 5 mL	3008-5



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