Ketamine

Urine HEIA® Drug Screening Kit

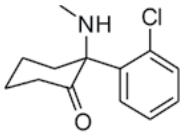
Ketamine is an anesthetic agent used in the United States since 1972 for veterinary and pediatric medicine. It is also used in the treatment of depression and postoperative pain management. However, in recent years it has gained popularity as a street drug used at clubs and raves due to its hallucinogenic effects.

Administration: Oral; intravenous; intramuscular; insufflation

Elimination: Ketamine metabolizes by n-demethylation to norketamine and further dehydrogenates to dehydronorketamine. After 72 hours of a single dose, 2.3% of ketamine is unchanged, 1.6% is norketamine, 16.2% is dehydronorketamine, and 80% is hydroxylated derivatives of ketamine.[1,2]

Abuse Potential: An overdose can cause unconsciousness and dangerously slowed breathing.

Ketamine



Formula: $C_{13}H_{16}ClNO$

Systematic Name: (RS)-2-(2-chlorophenyl)-2 (methylamino)cyclohexanone

Brand Names: Ketanest®, Ketaset®, Ketalar®

- Exclusively from Immunalysis
- Designed for qualitative or semi-quantitative testing
- Accurate and trusted results
- Liquid stable and ready to use

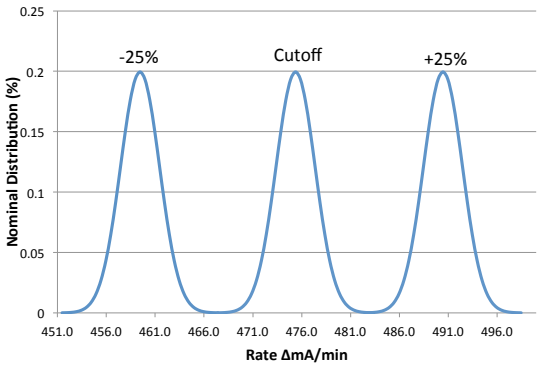
1. R. Baselt, Disposition of Toxic Drugs and Chemicals in Man, Fourth Edition, p. 412-414.
2. K. Moore, J.Skerov, B.Levine, and A.Jacobs, Urine Concentrations of Ketamine and Norketamine Following Illegal Consumption, J.Anal, Toxicol. 25: 583-588 (2001).

Ketamine Urine HEIA® Drug Screening Kit

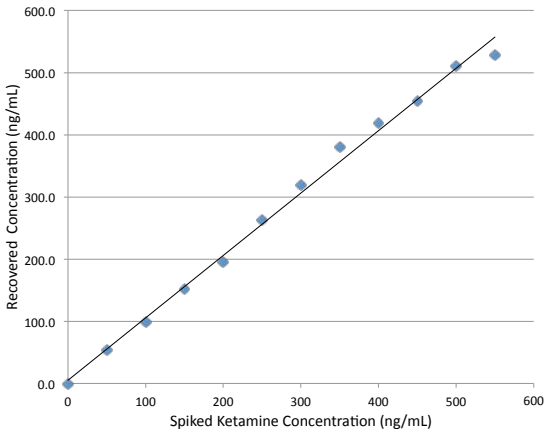
Assay Specifications

Methodology: Homogeneous enzyme immunoassay
Cutoff: 100 ng/mL
Calibrator Range: 0-500 ng/mL

Overlap: Ketamine (100 ng/mL cutoff)



Analytical Recovery: Ketamine



Semi-Quantitative Cross-Reactivity at 100 ng/mL

Analyte	Analyte Concentration (ng/mL)	Ketamine Equivalents (ng/mL)	Cross-Reactivity (%)
Ketamine	100	100	100
Dehydronorketamine	100,000	<75	N/D
Methoxetamine	100,000	<75	N/D
Norketamine	400	100	25

Accuracy:

		GC-MS Confirmation (100 ng/mL)	
		Positive	Negative
HEIA (100 ng/mL)	Positive	51*	0
	Negative	0	40

*18 of the 51 samples were confirmed by mass spectrometry with results of both ketamine & nor-ketamine. 33 of the 51 samples were confirmed by mass apectrometry with results of ketamine.

Semi-Quantitative Precision at 100 ng/mL

Interday Precision (N = 80)		
Concentration	**Mean Conc. (ng/mL)**	**C.V.%**
25 ng/mL	26.6	7.4
50 ng/mL	51.5	5.6
75 ng/mL (control LOW)	77.7	5.6
100 ng/mL calibrator	103.1	4.9
125 ng/mL (control HIGH)	129.7	4.1
150 ng/mL	157.5	3.5
175 ng/mL	181.3	3.1
200 ng/mL	203.2	4.8

Order - Ketamine (HEIA)

Catalog Number	Description
340UR-0025	25 mL kit
340UR-0060W	60 mL wedge kit
340UR-0100	100 mL kit
340UR-0500	500 mL kit
C340UR-5-1	100 ng/mL calibrator
C340UR-5-2	75 and 125 ng/mL controls
C340UR-5-5	0, 50, 100, 200, and 500 ng/mL calibrators
Neg-10-1	10 mL negative reference calibrator

The charts and data provided above were generated in studies conducted by Immunalysis Corporation. This information is intended to be representative of the performance of the assay. Refer to the product insert for a full description of the performance characteristics for semi-quantitative and qualitative testing. For forensic use only.

MKT-1075-IMM REVC 1/19