

Benzodiazepines

Urine HEIA[®] Drug Screening Kit



Benzodiazepines are among the most commonly prescribed medications in the United States, being used in the treatment of anxiety, pain relief, sedation, and as anti-convulsants.

Although more than 2,000 different benzodiazepines have been produced, only about 15 are currently FDA 510(k) cleared in the United States. They are usually classified by how long their effects last.

Ultra-short acting – midazolam (Versed[®]), triazolam (Halcion[®])

Short-acting – alprazolam (Xanax[®]), lorazepam (Ativan[®])

Long-acting – chlordiazepoxide (Librium[®]), diazepam (Valium[®])

Common Brand Names: Xanax[®], Valium[®], Ativan[®], Serax[®]

Abuse Potential: Benzodiazepines have a high potential for abuse, especially when used with other depressants. This abuse is partially related to the toxic effects that they produce and also to their widespread availability. They can be chronically abused or, as seen more commonly in hospital emergency departments, intentionally or accidentally taken in overdose. Death and serious illness rarely result from benzodiazepine abuse alone; however, they are frequently taken with either alcohol or other medications.

 Alprazolam (Xanax [®])	 Chlordiazepoxide (Librium [®])
 Diazepam (Valium [®])	 Lorazepam (Ativan [®])
 Oxazepam (Serax [®])	 Triazolam (Halcion [®])

- Target analyte is oxazepam
- Semi-quantitative or qualitative testing
- Accurate and trusted results
- Liquid stable and ready to use



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Assay Specifications

Methodology: Homogeneous enzyme immunoassay

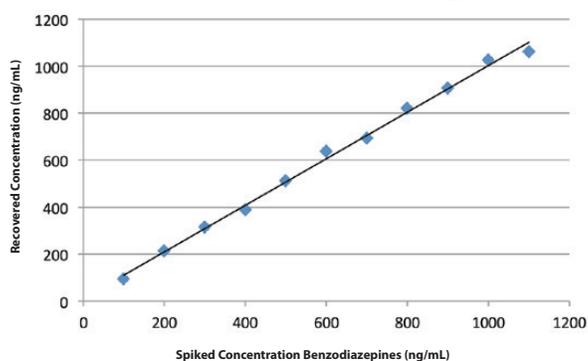
Cutoff: 200 ng/mL

Calibrator Range: 0-1000 ng/mL

Accuracy:

		LC-MS/MS Confirmation (200 ng/mL)	
		Positive	Negative
HEIA (200 ng/mL)	Positive	42	0
	Negative	1	43

Analytical Recovery: Benzodiazepines



Cross-Reactivity

Analyte	Analyte Concentration (ng/mL)	Cross-Reactivity (%)
Oxazepam	200	100.0
Alpha-hydroxyalprazolam	110	181.8
Alprazolam	120	166.7
7-Aminoclonazepam	100,000	<0.002
7-Aminoflunitrazepam	3,500	5.7
7-Aminonitrazepam	35,000	0.6
Bromazepam	750	26.7
Chlordiazepoxide	1,600	12.5
Clorazepate	200	100.0
Clobazam	650	30.8
Clonazepam	180	111.1
Demoxepam	5,500	3.6
Desalkylflurazepam	75	266.7
Diazepam	100	200.0
Estazolam	225	88.9
Flunitrazepam	125	160.0
Flurazepam	110	181.8
Lorazepam	60	333.3
Lorazepam Glucuronide	180	111.1
Lormetazepam	50	400.0
Medazepam	500	40.0
Midazolam	40	500.0
Nitrazepam	700	28.6
Norchlordiazepoxide	2,200	9.1
Nordiazepam	180	111.1
Oxazepam Glucuronide	1,300	15.4
Prazepam	95	210.5
Temazepam	110	181.8
Temazepam Glucuronide	700	28.6
Triazolam	50	400.0

Semi-Quantitative Precision at 200 ng/mL

Interday Precision (N = 80)

Concentration	Result	Total Result
100 ng/mL	NEG	80 Negative
150 ng/mL (control LOW)	NEG	80 Negative
200 ng/mL calibrator	n/a	34 Negative/ 46 Positive
250 ng/mL (control HIGH)	POS	80 Positive
300 ng/mL	POS	80 Positive

Order - Benzodiazepines (HEIA)

Catalog Number	Description
314UR-0025	25 mL kit
314UR-0060W	60 mL wedge kit
314UR-0100	100 mL kit
314UR-0500	500 mL kit
For calibrator and control set information, please refer to the product insert.	
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 in vitro diagnostic use.