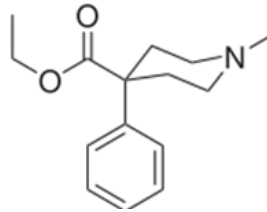


Meperidine

Homogeneous Enzyme Immunoassay (HEIA™)

IMMUNALYSIS



Formula: C₁₅H₂₁NO₂

Systematic Name: Ethyl 1-methyl-4-phenylpiperidine-4-carboxylate

Brand Names: Demerol®, Dolantin®, Mepergan®, Pethidine

About Meperidine: Meperidine is a synthetic narcotic analgesic which acts on the central nervous system by a mechanism that is similar to Morphine, although with a shorter duration of action. Meperidine has approximately one tenth the potency of Morphine and tolerance to Meperidine develops more slowly. It is used to treat moderate to severe pain, producing clinical effects of analgesia, sedation, euphoria, and respiratory depression.¹

Administration: Tablet, liquid

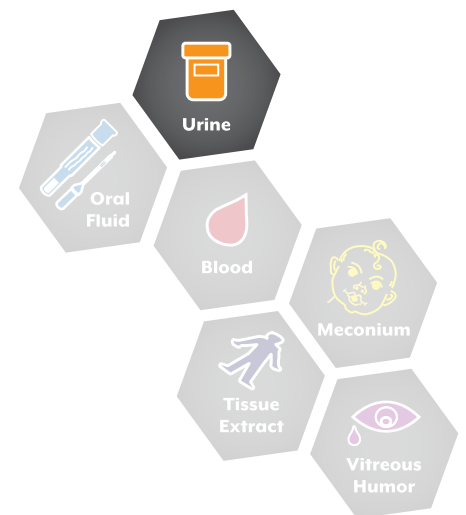
Elimination: Meperidine is metabolized in the liver to Normeperidine and Meperidinic Acid.

Abuse Potential: Meperidine has potential for abuse and diversion and can be habit forming. Physical dependence and tolerance may develop upon repeated administration. Like other narcotics Meperidine is subject to the provisions of the federal narcotic laws.¹

Exclusively
from Immunalysis

Accurate and reliable

Ready to use



1. HOSPIRA, INC, Lake Forest, IL 60045 USA, Demerol package insert, Rev: March, 2005.

Demerol® is a registered trademark of Abbott Laboratories. Mepergan® is a registered trademark of Star Pharmaceuticals, LLC. Dolantin® is a registered trademark of Sanofi-Aventis.



Meperidine (HEIA™)



Assay Specifications

Methodology: Homogeneous Enzyme Immunoassay

Cutoff: 200 ng/mL

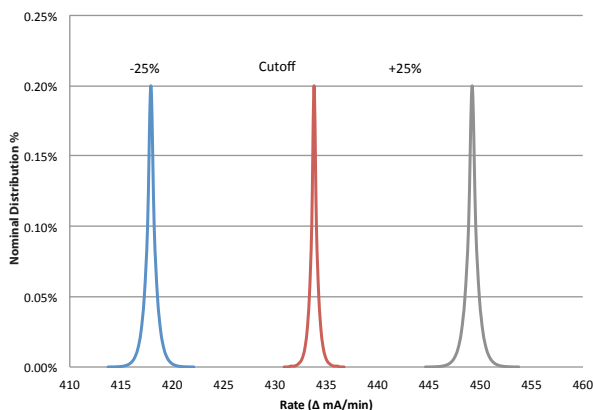
Calibration Range: 0-1000 ng/mL

Cross-Reactivity

Analyte	Analyte Concentration (ng/mL)	Meperidine Equivalent (ng/mL)	Cross-Reactivity (%)
Meperidine	200	200	100
Normeperidine	10,000	200	2

The following analytes were tested for cross reactivity at 100,000 ng/mL and none were detected: Buprenorphine, Buprenorphine Glucuronide, Codeine, Dihydrocodeine, Hydromorphone, Hydrocodone, Morphine, Morphine 3-gluc., Norbuprenorphine, Norcodeine, Normorphine, Naloxone, Naltrexone, Oxycodone, Oxymorphone, Propoxyphene and Tramadol.

Overlap: Meperidine (200 ng/mL Cutoff)



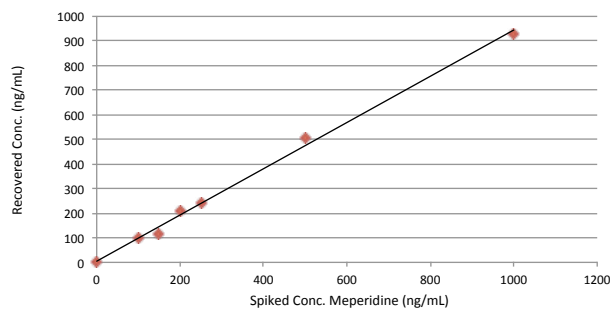
GC-MS Confirmation (200 ng/mL)

HEIA (200 ng/mL)

	Positive	Negative
Positive	31	2*
Negative	0	67

*The two urine specimens that did not confirm positive at a GC-MS cutoff of 200 ng/mL of Meperidine contained 188 and 172 ng/mL of Meperidine.

Meperidine: Analytical Recovery



Qualitative Precision at 200 ng/mL

Interday Precision (n = 80)

Concentration (ng/mL)	Rate (ΔmA/min)	SD	CV%
150 Control LOW	270	2.02	0.75
200 Calibrator	284	2.55	0.90
250 Control HIGH	303	2.36	0.78

ORDER - Meperidine (HEIA)

Catalog #	Description
303-0025 / -0100 / -0500	25 mL / 100 mL / 500 mL Kit
C303-10-1	200 ng/mL Calibrator
C303-10-2	150 and 250 ng/mL Controls
C303-10-5	0, 100, 200, 500 and 1000 ng/mL Calibrators
Neg-10-1	10 mL Negative Urine Control