

# ENVIROLOGIX Inc. - Human Exposure Monitoring Kits

## DEET (ELISA Kit)

### ● Intended use

The Envirologix Deet In Urine Plate Kit Is Designed For The Quantitative Laboratory Detection Of Deet Insect Repellent Residues In Urine Samples, With An Assay Range From 15 To 750 Parts Per Billion (Ppb).

### ● General

The EnviroLogix Deet in Urine Plate Kit is a competitive Enzyme-Linked ImmunoSorbent Assay (ELISA). In the test, Deet insect repellent residues in the sample compete with enzyme (horseradish peroxidase)-labeled Deet for a limited number of antibody binding sites on the inside surface of the test wells. After a simple wash step, the outcome of the competition is visualized with a color development step. As with all competitive immunoassays, sample concentration is inversely proportional to color development.

*Darker color = Lower concentration*

*Lighter color = Higher concentration*

The EnviroLogix Deet in Urine Plate Kit can be used in the following testing applications:

- Human Exposure Monitoring (Applicators, Handlers, Users).
- Public Health Screening Programs.
- Health Risk Assessment.

Materials Provided:	Materials Required But Not Provided:
<ul style="list-style-type: none"> <li>- 8 x Strips Of 12 Antibody-Coated Wells each, in plate frame.</li> <li>- 1 x Vial of 15 ppb Deet Calibrator Stock Solution (50X in methanol, Actual Concentration = 0.3 ppb*).</li> <li>- 1 x Vial of 100 ppb Deet Calibrator Stock Solution (50X in methanol, Actual Concentration = 2 ppb*).</li> <li>- 1 x Vial of 750 ppb Deet Calibrator Stock Solution (50X in methanol, Actual Concentration = 15 ppb*).</li> <li>- 1 x Bottle of 10x Sample Diluent.</li> <li>- 1 x Bottle of Deet-enzyme Conjugate.</li> <li>- 1 x Bottle of Substrate.</li> <li>- 1 x Bottle of Stop Solution.</li> </ul> <p>* The difference between the stated and actual concentration is to correct for the 1:50 dilution required for sample preparation.</p>	<ul style="list-style-type: none"> <li>- Distilled Water (or equivalent) for preparation of calibrators and dilution of sample diluent concentrate.</li> <li>- Glass Vials or tubes for dilution of calibrators and urine samples.</li> <li>- Positive-Displacement Pipetter with disposable tips and plungers for preparation of calibrators (capable of delivering 20 microliters (µL)).</li> <li>- Pipette(s) capable of delivering 4.9 mL.</li> <li>- Disposable Tip, Adjustable Air Displacement Pipette which will measure 100 µL.</li> <li>- 200 ml graduated cylinder.</li> <li>- Marking Pen (indelible).</li> <li>- Tape or Parafilm.</li> <li>- Timer (1 hour and 30 minutes).</li> <li>- Cool Tap Or Distilled Water for rinsing wells.</li> <li>- Microtiter Plate Reader or strip reader.</li> <li>- Microtiter Plate Washer (optional).</li> <li>- Twelve-Channel Pipette that will measure 100 µL (optional).</li> <li>- Racked Dilution Tubes for loading samples into the plate with a 12-channel pipette (optional).</li> <li>- Orbital Plate Shaker (optional).</li> </ul>

### Kit Specifications:

Plate Format:	- 96 Well.
Time Requirement:	- 2 h 15 min.
Detection Limit:	- 10 ppb.
Quantification Limit:	- 20 ppb.
Cross Reaction:	- Deet (N,Ndiethyl-m-Toluamide) (0.2 ppb).
(Limit Of Detection)	- o-Toluamide (>10000 ppb).
	- m-Toluamide (>10000 ppb).

Measurement:  
Product ID #:

- p-Toluamide (>10000 ppb).
- Caffeine (>10000 ppb).
- Microtiter Plate Reader or strip reader.
- BP011.