



tDPD

For **Research Use Only**. Not for use in diagnostic procedures.

The MicroVue tDPD EIA measures total deoxypyridinoline (tDpd) in urine and serum.

Format

- ELISA
- 96-well microplate with reagents sufficient to test 40 samples in duplicate
- Sample type: Serum or urine
- Controls: High, low included

Antibody Specificity

- Free Dpd (all Dpd is hydrolyzed to free form)
- <1% reactivity with pyridinoline

Species Reactivity

- Baboon, Cow, Dog, Guinea Pig, Horse, Human, Mouse, Rat, Rhesus Macaque, Human cell culture, Rabbit, Pig, Cat, Cynomolgus Macaque, Sheep

Specimen – Serum or Urine

- Fasting serum collected to avoid hemolysis
- Urine, or human cell culture

Hydrolysis Steps

- Prepare samples
 - For serum samples*
 - Mix samples with acid reagent
 - Centrifuge for 5 minutes
 - Add supernatants to hydrolysis plate

For urine samples

- Dilute samples with water, 1:10
- Add acid reagent to hydrolysis plates
- Add diluted samples to hydrolysis plate for urine and serum
- Incubate 18-20 hours at 99°C in PCR thermocycler or Quidel Hydrolysis Unit (Cat. #4838)
- Cool to 4°C
- Neutralize with base reagent

Assay Steps

- Add 50 µL Assay Buffer to all wells
- Add 50 µL diluted Standards and Controls and hydrolyzed/neutralized samples
- Incubate 30 minutes at 2°C to 8°C
- Add 50 µL Enzyme Conjugate
- Incubate 120 ± 5 minutes at 2°C to 8°C in the dark
- Wash 3 times
- Add 150 µL Substrate.
- Incubate 120 ± 5 minutes at 20°C to 28°C
- Add 100 µL Stop Solution
- Measure absorbance at 405 nm

Assay Performance

Method: Competitive

Analyte: Deoxypyridinoline

Specimen Volume: 100 µL serum, 50 µL urine

Limit of Detection: 0.5 nmol/L

Precision CVs (inter-assay): 10.1%-16.8%

Precision CVs (intra-assay): 5.3%-12.1%

Assay Time: Approx. 23-25 Hours

Specificity:

- Free DPD 100%
- Free PYD < 1%
- PYD/DPD peptides <2.5%

MicroVue tDPD EIA – Cat. #8032

Also available:

Pyd/Dpd HPLC Calibrator – Cat. #8004

INT-PYD Internal Standard – Cat. #8006

Hydrolysis Unit – Cat. #4838

