



QuantiChrom™ Uric Acid Assay Kit

Uric acid is the waste product produced from the degradation of purines. In healthy human, uric acid is filtered and removed from the blood by the kidneys and excreted into urine. Because a number of kidney diseases are known to affect uric acid levels, uric acid determination is thus important and useful in diagnosing and evaluating kidney diseases. For example, when uric acid is present in the blood at abnormally high levels, it tends to crystallize in body joints, resulting in gout, a very painful inflammatory condition. Increased levels of uric acid are also known to be associated with uremia, leukemia, pneumonia.

Simple, direct and automation-ready procedures for measuring uric acid concentration in blood are becoming popular in research and drug discovery. BioAssay Systems' uric acid assay kit is designed to measure uric acid directly in serum without any pretreatment. The improved method utilizes 2,4,6-tripyridyl-s-triazine that forms a blue colored complex specifically with uric acid. The intensity of the color, measured at 590nm, is directly proportional to the uric acid concentration in the serum. The optimized formulation substantially reduces interference by substances in the raw samples.

APPLICATIONS:

Direct Assays: uric acid in serum, plasma, urine and biological samples.

Drug Discovery/Pharmacology: effects of drugs on uric acid metabolism.

KEY FEATURES:

Sensitive and accurate. Use as little as 5 μ L samples. Linear detection range 0.22 mg/dL (13 μ M) to 30 mg/dL (2380 μ M) uric acid in 96-well plate assay.

Simple and high-throughput. The procedure involves addition of a single working reagent and incubation for 30 min. Can be readily automated as a high-throughput assay in 96-well plates for thousands of samples per day.

Improved reagent stability and versatility. The optimized formulation has greatly enhanced the reagent and signal stability. Assays can be performed in cuvet or 96-well plate.

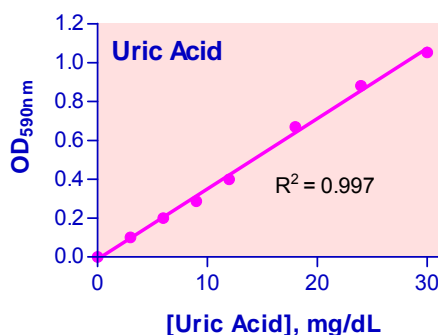
Low interference in biological samples. No pretreatments are needed. Assays can be directly performed on serum, plasma and urine.

PRODUCT INFORMATION:

QuantiChrom™ Uric Acid Assay Kit DIUA-250

Each kit is sufficient for 250 assays in 96-well plate. Kit includes:

- 1 x 50mL Reagent A
- 1 x 6mL Reagent B
- 1 x 6mL Reagent C
- 1 x 1mL 10 mg/dL uric acid standard
- 1 x 1mL blank control



Standard Curve in 96-well plate in assay

REFERENCES:

[1]. Morin LG, Prox J (1973). Reduction of ferric phenanthroline-a procedure for determining serum uric acid. *Am J Clin Pathol.* 60(5):691-4.

[2]. Yazar E, Elmas M, Altunok V, Sivrikaya A, Oztekin E, Birdane YO (2003). Effects of aminoglycoside antibiotics on renal antioxidants, malondialdehyde levels, and some serum biochemical parameters. *Can J Vet Res.* 67(3):239-40.

[3]. Kang DH, Nakagawa T, Feng L, Watanabe S, Han L, Mazzali M, Truong L, Harris R, Johnson RJ (2002). A role for uric acid in the progression of renal disease. *J Am Soc Nephrol.* 13(12):2888-97.