



QuantiChrom™ Nitric Oxide Assay Kit

Nitric oxide (NO) is a reactive radical that plays an important role in many key physiological functions. NO, an oxidation product of arginine by nitric oxide synthase, is involved in host defense and development, activation of regulatory proteins and direct covalent interaction with functional biomolecules.

Simple, direct and automation-ready procedures for measuring NO are becoming popular in research and drug discovery. Since NO is oxidized to nitrite and nitrate, it is common practice to quantitate $\text{NO}_2^-/\text{NO}_3^-$ as a measure for NO level. BioAssay Systems' QuantiChrom™ Nitric Oxide Assay Kit is designed to accurately measure NO production following reduction of nitrate to nitrite using improved Griess method. The procedure is simple and the time required for sample pretreatment and assay is reduced to 40 min.

APPLICATIONS:

Direct Assays: NO in plasma, serum, urine, tissue/cells and foods.

Drug Discovery/Pharmacology: effects of drugs on NO metabolism.

KEY FEATURES

Sensitive and accurate. Linear detection range 0.1 - 50 μM in 96-well plate.

Rapid and reliable. Using optimized Cd/Cu reagent, the time required for reduction of NO_3^- to NO_2^- is 15 min at >98.5% conversion rate.

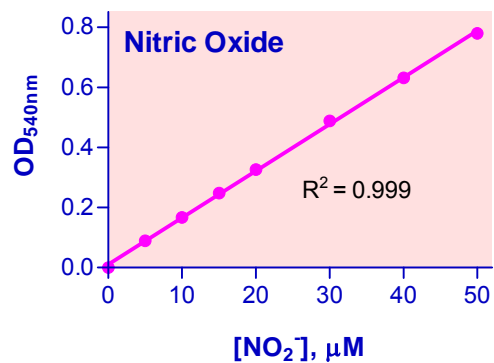
Simple and high-throughput. The procedure involves mixing sample with two reagents, incubation for 5 min and reading the optical density. Can be readily automated to measure hundreds of samples per day.

PRODUCT INFORMATION:

QuantiChrom™ Nitric Oxide Assay Kit DINO-250

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

- 1 x 14 mL Reagent A
- 1 x 14 mL Reagent B
- 1 x 1.0 mL 1.5M ZnSO_4 solution (20x concentrate)
- 1 x 1.0 mL 1.65 M NaOH solution (30x concentrate)
- 1 x 30 mL Glycine Buffer
- 1 x 50 mL Activation Buffer (3x concentrate)
- 1 x 15 gram Cadmium granules
- 1 x 1.0 mL 1 mM nitrite standard



Standard Curve in 96-well plate assay

REFERENCES:

- [1]. Cortas et al (1990). Clin Chem. 36:1440-3. (serum and urine).
- [2]. Ridnour LA et al (2000). Anal Biochem. 281:223-9. (cell culture media).
- [3]. Sen NP et al (1978). J Assoc Off Anal Chem. 61:1389-1394. (foods).