

Colorimetric Nitric Oxide Assay Kit

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CATALOG #
AAA71821

PRODUCT SYNONYMS

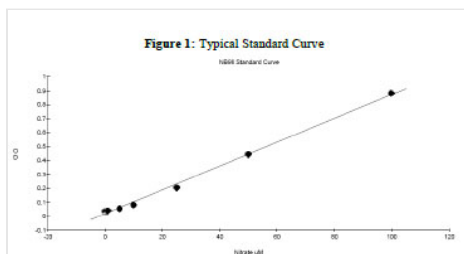
Colorimetric Nitric Oxide; Colorimetric Nitric Oxide Assay Kit; Nitric Oxide Colorimetric Assay Kit; Colorimetric Nitric Oxide assay kit

PRODUCT SPECIFICATIONS

Preparation and Storage

1. Store the components of this kit at the temperatures specified on the labels.
2. Unopened reagents are stable until the indicated kit expiration date.
3. Reconstituted Nitrate Reductase is stable for 6 months if stored at At -20 degree C; one year if stored at -80 degree C.
4. Diluted Nitrate Standards may be stored at 4 degree C for later use.
5. Reconstituted NADH should be stored at At -20 degree C. Avoid freeze-thaw cycles! Store in the dark.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for Colorimetric Nitric Oxide assay kit

Principle of the Assay: In aqueous solution, nitric oxide rapidly degrades to nitrate and nitrite. Spectrophotometric quantitation of nitrite using Griess Reagent is straightforward, but does not measure nitrate. This kit employs the NADHdependent enzyme nitrate reductase for conversion of nitrate to nitrite prior to the quantitation of nitrite using Griess reagent — thus providing for accurate determination of total NO production. This kit can be used to accurately measure as little as 1 pmol/uL (~1uM) NO produced in aqueous solutions. Very little sample is required (5 to 85 uL depending on the [NO] in the sample). The completed reaction is read at 540 nm.!!**Background/Introduction:** This kit employs immunoaffinity purified Nitrate Reductase (NaR) enabling the measure of total nitric oxide (NO) produced in in vitro experimental systems. Nitric oxide can be spectrophotometrically assayed by measuring the accumulation of its stable degradation products, nitrate and nitrite. The ratio of these two products in biological fluids, tissue culture media, etc. may vary substantially. Hence, for accurate assessment of the total nitric oxide generated, one must monitor both nitrate and nitrite. An excellent solution to this problem is the enzymatic conversion of nitrate to nitrite by the enzyme nitrate reductase, followed by quantitation of nitrite using Griess Reagent. In addition to providing all necessary components in a microtiter format, this kit employs affinity purified nitrate reductase and NADH, thereby circumventing some of the potential problems reported for NO measurement using NADPH dependent nitrate reductases.

References

1. Schmidt, H. H., et. al.; (1995) Biochemica 2:22-23

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.