Nitric Oxide (total), detection kit

Sensitive, efficient, convenient method for detection of total Nitric oxide in just 40min

The Nitric Oxide (total), detection kit is based on the enzymatic conversion of nitrate to nitrite by the enzyme nitrate reductase, followed by the Griess reaction to form a colored azo dye product. Quantification is performed by measuring absorption at 540-570 nm. Only 0.050 ml diluted sample needed per well saves precious sample.

Nitric oxide (NO) is a major mammalian secretory product that initiates host defense, homeostatic and developmental functions by either direct effect or intercellular signaling. NO is the product of a five-electron oxidation of the amino acid L-arginine mediated by nitric oxide synthase. As a direct effector, NO is thought to activate regulatory proteins, kinases and proteases that are directed by reactive oxygen intermediates. Activation of the immune system is associated with an increase in macrophage NO production. Soluble NO exerts a variety of homeostatic influences as an activator of soluble guanylyl cyclase, a neuronal potentiator, a peripheral nervous system neurotransmitter, and a contraction regulator of both smooth muscle and vascular tissue. In addition, NO has been linked to the formation of olfactory and synaptic memories and remodeling.

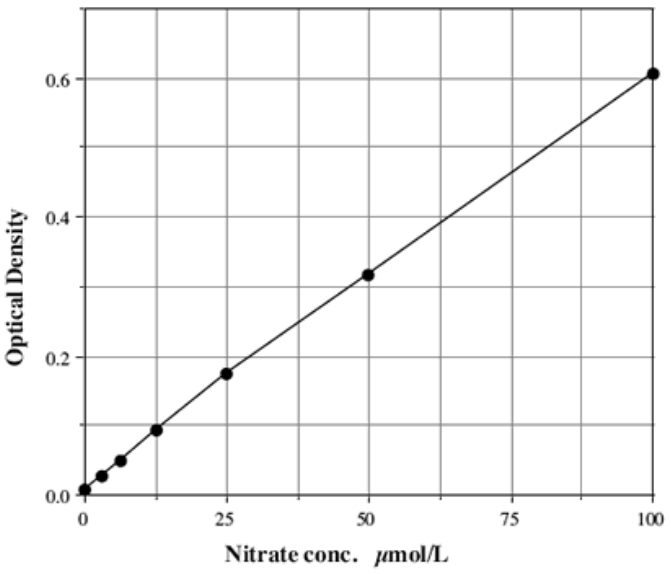
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Ordering Information Order Online »

ADI-917-020	2x96 wells

Manuals, SDS & CofA View Online »

- Efficient - only 50 µl diluted sample needed, saving your precious sample
- Sensitive - detect as little as 0.625 µmol/L
- Trusted - widely cited in peer-reviewed publications
- Fast - results from up to 80 samples in duplicate in just 40 minutes


Optical Density
0.0
0.2
0.4
0.6
0
25
50
75
100
Nitrate conc. µmol/L

Handling & Storage

Use/Stability	Store all components at 4°C, except nitrate reductase at -20°C.
Shipping	Blue Ice

Regulatory Status

RUO - Research Use Only

Product Details

Application	Colorimetric detection
Application Notes	For the quantitative determination of total Nitric Oxide in culture supernatants, plasma, serum, saliva, and urine from any species. Cited sample type includes tissue (ref).
Contents	Microtiter plate, Nitrate Reductase, Nitrate Reductase Storage Buffer, NADH, Nitrate Standard, Reaction buffer concentrate, Griess Reagent I, Griess Reagent II
Sensitivity	0.625 µmol/L (range 3.125 – 100 µmol/L)
Species Reactivity	Species independent

Last modified: May 29, 2024

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