

Nitric Oxide Synthase Activity Typed Assay kit

Nitric oxide synthase (NOS, EC 1.14.13.39, written as total NOS (TNOS) after) is a type of enzyme that catalyzes the synthesis of NO from L-arginine in living organisms. It mainly exists in various cells such as vascular smooth muscle, macrophages, endothelial cells, neurons, liver cells, and glomerular mesangial cells. According to the different dependence of its enzyme activity on calcium ions, it can be divided into structural NOS (constitutive NOS, cNOS) and injury induced NOS (inducible NOS, iNOS). The former requires a certain concentration of calcium ions to activate, while the latter does not rely on exogenous calcium ions. NOS catalyzes L-arginine, molecular oxygen and NADPH to form NO and NADP⁺. NO is easily oxidized to form NO₂⁻ and NO₃⁻ in aqueous solution. Under acidic conditions, NO₂⁻ and diazonium sulfonamide produce diazo compounds. The compounds could further couple with naphthyl vinyl diamine. The product has a characteristic absorption peak at 550 nm and its absorbance value can be measured to calculate NOS activity.

Catalog No.	250569
Size	50 Assays / 100 Assays
Product Category	Colorimetric Assay
Storage/Stability	-20°C/6 months
Shipping	Gel Packs