

nitroarene dioxygenase

Cat. No. EXWM-0690

Lot. No. (See product label)

Introduction

Description

This enzyme is a member of the naphthalene family of bacterial Rieske non-heme iron dioxygenases. It comprises a multicomponent system, containing a Rieske [2Fe-2S] ferredoxin, an NADH-dependent flavoprotein reductase (EC 1.18.1.3, ferredoxin-NAD⁺ reductase), and an $\alpha\beta\gamma$ oxygenase. The enzyme forms of a cis-dihydroxylated product that spontaneously rearranges to form a catechol with accompanying release of nitrite. It can typically act on many different nitroaromatic compounds, including chlorinated species. Enzymes found in different strains may have different substrate preferences. Requires Fe²⁺.

Synonyms

cnbA (gene name)

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 1.14.12.23

Reaction

nitrobenzene + NADH + O₂ = catechol + nitrite + NAD⁺

Notes

This item requires custom production and lead time is between 5-9 weeks. We can custom produce according to your specifications.

Storage and Shipping Information

Storage

Store it at +4 °C for short term. For long term storage, store it at -20 °C~-80 °C.