

NADPH:quinone reductase

Cat. No. EXWM-1594

Lot. No. (See product label)

Introduction

Description

A zinc enzyme, specific for NADPH. Catalyses the one-electron reduction of certain quinones, with the orthoquinones 1,2-naphthoquinone and 9,10-phenanthrenequinone being the best substrates. Dicoumarol [cf. EC 1.6.5.2 NAD(P)H dehydrogenase (quinone)] and nitrofurantoin are competitive inhibitors with respect to the quinone substrate. The semiquinonefree-radical product may be non-enzymically reduced to the hydroquinone or oxidized back to quinone in the presence of O₂. In some mammals, the enzyme is abundant in the lens of the eye, where it is identified with the protein ζ-crystallin.

Synonyms

NADPH2:quinone reductase

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 1.6.5.5

CAS No.

9032-20-6

Reaction

$\text{NADPH} + \text{H}^+ + 2 \text{ quinone} = \text{NADP}^+ + 2 \text{ semiquinone}$

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.