Creative Enzymes®

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 NADPH + H+ + 2 quinone = NADP+ + 2 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 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃.