

NADP-retinol dehydrogenase

Cat. No. EXWM-0211

Lot. No. (See product label)

Introduction

Description

Greater catalytic efficiency in the reductive direction. This observation, and the enzyme's localization at the entrance to the mitochondrial matrix, suggest that it may function to protect mitochondria against oxidative stress associated with the highly reactive retinal produced from dietary β -carotene by EC 1.13.11.63 (β -carotene 15,15'-dioxygenase). Km-values for NADP⁺ and NADPH are at least 800-fold lower than those for NAD⁺ and NADH. This enzyme differs from EC 1.1.1.105, retinol dehydrogenase, which prefers NAD⁺ and NADH.

Synonyms

all-trans retinal reductase (ambiguous); all-trans-retinol dehydrogenase; NADP(H)-dependent retinol dehydrogenase/reductase; RDH11; RDH12; RDH13; RDH14; retinol dehydrogenase 12; retinol dehydrogenase 14; retinol dehydrogenase [NADP⁺]; RaIR1; PSDR1

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 1.1.1.300

Reaction

retinol + NADP⁺ = retinal + NADPH + H⁺

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.