Creative Enzymes®

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+]; RalR1; 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 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃.