Creative Enzymes®

monodehydroascorbate reductase (NADH)

Cat. No. EXWM-1593

Lot. No. (See product label)

Introduction

Description	This enzyme belongs to the family of oxidoreductases, specifically those acting on NADH or NADPH with a quinone or similar compound as acceptor. This enzyme participates in ascorbate and aldarate metabolism. In plants, the monodehydroascorbate reductase (MDAR) is an enzymatic component of the glutathione-ascorbate cycle that is one of the major antioxidant systems of plant cells for the protection against the damages produced by reactive oxygen species (ROS). The MDAR activity has been described in several cell compartments, such as chloroplasts, cytosol, mitochondria, glyoxysomes, and leaf peroxisomes.
Synonyms	NADH:semidehydroascorbic acid oxidoreductase; MDHA; semidehydroascorbate reductase; AFR; AFR-reductase; ascorbic free radical reductase; ascorbate free radical reductase; SOR; MDAsA reductase (NADPH) SDA reductase; NADH:ascorbate radical oxidoreductase; NADH-semidehydroascorbate oxidoreductase; ascorbate free-radical reductase NADH:AFR oxidoreductase; monodehydroascorbate reductase (NADH2)

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 1.6.5.4
CAS No.	9029-26-9
Reaction	NADH + H+ + 2 monodehydroascorbate = NAD+ + 2 ascorbate
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 ℃.