Creative Enzymes®

anthocyanidin reductase [(2R,3R)-flavan-3-ol-forming]

Cat. No. EXWM-1346

Lot. No. (See product label)

Introduction

Description	The enzyme participates in the flavonoid biosynthesis pathway found in plants. It catalyses the double reduction of anthocyanidins, producing (2R,3R)-flavan-3-ol monomers required for the formation of proanthocyanidins. While the enzyme from the legume Medicago truncatula (MtANR) can use both NADPH and NADH as reductant, that from the crucifer Arabidopsis thaliana (AtANR) uses only NADPH. Also, while the substrate preference of MtANR is cyanidin>pelargonidin>delphinidin, the reverse preference is found with AtANR. cf. EC 1.3.1.112, anthocyanidin reductase [(2S)-flavan-3-ol-forming].
Synonyms	ANR (gene name) (ambiguous); flavan-3-ol:NAD(P)+ oxidoreductase; anthocyanidin reductase (ambiguous)

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 1.3.1.77
CAS No.	93389-48-1
Reaction	a (2R,3R)-flavan-3-ol + 2 NAD(P)+ = an anthocyanidin with a 3-hydroxy group + 2 NAD(P)H + 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 ℃.