

## 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 °C for short term. For long term storage, store it at -20 °C~-80 °C.