

## anthocyanidin reductase [(2S)-flavan-3-ol-forming]

Cat. No. EXWM-1285

Lot. No. (See product label)

### Introduction

#### Description

The enzyme, characterized from *Vitis vinifera* (grape), participates in the flavonoid biosynthesis pathway. It catalyses the double reduction of anthocyanidins, producing a mixture of (2S,3S)- and (2S,3R)-flavan-3-ols. The enzyme catalyses sequential hydride transfers to C-2 and C-4, respectively. Epimerization at C-3 is achieved by tautomerization that occurs between the two hydride transfers. cf. EC 1.3.1.77, anthocyanidin reductase [(2R,3R)-flavan-3-ol-forming].

### Product Information

**Form** Liquid or lyophilized powder

**EC Number** EC 1.3.1.112

**Reaction** (1) a (2S,3R)-flavan-3-ol + 2 NADP<sup>+</sup> = an anthocyanidin with a 3-hydroxy group + 2 NADPH + H<sup>+</sup>; (2) a (2S,3S)-flavan-3-ol + 2 NADP<sup>+</sup> = an anthocyanidin with a 3-hydroxy group + 2 NADPH + H<sup>+</sup>

**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.