

## aurachin B dehydrogenase

Cat. No. EXWM-0314

Lot. No. (See product label)

### Introduction

**Description** The enzyme from the bacterium *Stigmatella aurantiaca* catalyses the final step in the conversion of aurachin C to aurachin B. In vivo the enzyme catalyses the reduction of 4-hydroxy-2-methyl-3-oxo-4-[(2E,6E)-farnesyl]-3,4-dihydroquinoline-1-oxide to form 2-methyl-1-oxo-4-[(2E,6E)-farnesyl]-3,4-dihydroquinoline-3,4-diol (note that the reactions written above proceed from right to left), which then undergoes a spontaneous dehydration to form aurachin B.

**Synonyms** AuaH

### Product Information

**Form** Liquid or lyophilized powder

**EC Number** EC 1.1.1.394

**Reaction**  $\text{aurachin B} + \text{NAD}^+ + \text{H}_2\text{O} = 4\text{-hydroxy-2-methyl-3-oxo-4-}[(2\text{E},6\text{E})\text{-farnesyl}]\text{-3,4-dihydroquinoline 1-oxide} + \text{NADH} + \text{H}^+$  (overall reaction); (1a)  $3,4\text{-dihydroxy-2-methyl-4-}[(2\text{E},6\text{E})\text{-farnesyl}]\text{-3,4-dihydroquinoline 1-oxide} + \text{NAD}^+ = 4\text{-hydroxy-2-methyl-3-oxo-4-}[(2\text{E},6\text{E})\text{-farnesyl}]\text{-3,4-dihydroquinoline 1-oxide} + \text{NADH} + \text{H}^+$ ; (1b)  $\text{aurachin B} + \text{H}_2\text{O} = 3,4\text{-dihydroxy-2-methyl-4-}[(2\text{E},6\text{E})\text{-farnesyl}]\text{-3,4-dihydroquinoline 1-oxide}$  (spontaneous)

**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.