

carboxynorspermidine synthase

Cat. No. EXWM-1524

Lot. No. (See product label)

Introduction

Description

The reaction takes place in the opposite direction. Part of a bacterial polyamine biosynthesis pathway. L-aspartate 4-semialdehyde and propane-1,3-diamine/putrescine form a Schiff base that is reduced to form carboxynorspermidine/carboxyspermidine, respectively. The enzyme from the bacterium *Vibrio cholerae* is essential for biofilm formation. The enzyme from *Campylobacter jejuni* only produces carboxyspermidine in vivo even though it also can produce carboxynorspermidine in vitro.

Synonyms

carboxynorspermidine dehydrogenase; carboxyspermidine dehydrogenase; CASDH; CANSDH; VC1624 (gene name)

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 1.5.1.43

Reaction

(1) carboxynorspermidine + H₂O + NADP⁺ = L-aspartate 4-semialdehyde + propane-1,3-diamine + NADPH + H⁺; (2) carboxyspermidine + H₂O + NADP⁺ = L-aspartate 4-semialdehyde + putrescine + NADPH + 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.