

13-deoxydaunorubicin hydroxylase

Cat. No. EXWM-0780

Lot. No. (See product label)

Introduction

Description

The enzymes from the Gram-positive bacteria *Streptomyces* sp. C5 and *Streptomyces peucetius* show broad substrate specificity for structures based on an anthracycline aglycone, but have a strong preference for 4-methoxy anthracycline intermediates (13-deoxydaunorubicin and 13-dihydrodaunorubicin) over their 4-hydroxy analogues (13-deoxycarminomycin and 13-dihydrocarminomycin), as well as a preference for substrates hydroxylated at the C-13 rather than the C-14 position.

Synonyms

DoxA

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 1.14.13.181

Reaction

(1) 13-deoxydaunorubicin + NADPH + H⁺ + O₂ = 13-dihydrodaunorubicin + NADP⁺ + H₂O; (2) 13-dihydrodaunorubicin + NADPH + H⁺ + O₂ = daunorubicin + NADP⁺ + 2 H₂O

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.