Creative Enzymes®

carbazole 1,9a-dioxygenase

Cat. No. EXWM-0689

Lot. No. (See product label)

Introduction

Description	This enzyme catalyses the first reaction in the pathway of carbazole degradation. The enzyme attacks at the 1 and 9a positions of carbazole, resulting in the formation of a highly unstable hemiaminal intermediate that undergoes a spontaneous cleavage and rearomatization, resulting in 2'-aminobiphenyl-2,3-diol. In most bacteria the enzyme is a complex composed of a terminal oxygenase, a ferredoxin, and a ferredoxin reductase. The terminal oxygenase component contains a nonheme iron centre and a Rieske [2Fe-2S] iron-sulfur cluster.
Synonyms	CARDO

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 1.14.12.22
Reaction	9H-carbazole + NAD(P)H + H+ + O2 = 2'-aminobiphenyl-2,3-diol + NAD(P)+
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 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃.