

## 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<sup>+</sup> + O<sub>2</sub> = 2'-aminobiphenyl-2,3-diol + NAD(P)<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.