dibenzothiophene monooxygenase

Cat. No. EXWM-0918

Lot. No. (See product label)

Introduction

Description	This bacterial enzyme catalyses the first two steps in the desulfurization pathway of dibenzothiophenes, the oxidation of dibenzothiophene into dibenzothiophene sulfone via dibenzothiophene-5-oxide. The enzyme forms a two-component system with a dedicated NADH-dependent FMN reductase (EC 1.5.1.42) encoded by the dszD gene, which also interacts with EC 1.14.14.22, dibenzothiophene sulfone monooxygenase.
Synonyms	dszC (gene name)

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 1.14.14.21
Reaction	dibenzothiophene + 2 FMNH2 + 2 O2 = dibenzothiophene-5,5-dioxide + 2 FMN + 2 H2O (overall reaction); (1a) dibenzothiophene + FMNH2 + O2 = dibenzothiophene-5-oxide + FMN + H2O; (1b) dibenzothiophene-5-oxide + FMNH2 + O2 = dibenzothiophene-5,5-dioxide + FMN + 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 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃.