

5-nitrosalicylate dioxygenase

Cat. No. EXWM-0584

Lot. No. (See product label)

Introduction

Description The enzyme, characterized from the soil bacterium *Bradyrhizobium* sp. JS329, is involved in the pathway of 5-nitroanthranilate degradation. It is unusual in being able to catalyse the ring fission without the requirement for prior removal of the nitro group. The product undergoes spontaneous lactonization, with concurrent elimination of the nitro group.

Synonyms naaB (gene name); 5-nitrosalicylate:oxygen 1,2-oxidoreductase (decyclizing)

Product Information

Form Liquid or lyophilized powder

EC Number EC 1.13.11.64

Reaction 5-nitrosalicylate + O₂ = 2-oxo-3-(5-oxofuran-2-ylidene)propanoate + nitrite (overall reaction); (1a) 5-nitrosalicylate + O₂ = 4-nitro-6-oxohepta-2,4-dienedioate; (1b) 4-nitro-6-oxohepta-2,4-dienedioate = 2-oxo-3-(5-oxofuran-2-ylidene)propanoate + nitrite (spontaneous)

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.