

## 5-hydroxyfuranocoumarin 5-O-methyltransferase

Cat. No. EXWM-1970

Lot. No. (See product label)

### Introduction

#### Description

Converts bergaptol into bergaptene, which has therapeutic potential in the treatment of psoriasis as it has photosensitizing and antiproliferative activities. The enzyme methylates the 5-hydroxy group of some hydroxy- and methylcoumarins, such as 5-hydroxyxanthotoxin, but has little activity on non-coumarin phenols. Caffeate, 5-hydroxyferulate and daphnetin are not substrates.  $\text{Cu}^{2+}$ ,  $\text{Zn}^{2+}$  and  $\text{Co}^{2+}$  cause enzyme inhibition. (see also EC 2.1.1.70, 8-hydroxyfuranocoumarin 8-O-methyltransferase)

#### Synonyms

furanocoumarin 5-methyltransferase; furanocoumarin 5-O-methyltransferase; bergaptol 5-O-methyltransferase; bergaptol O-methyltransferase; bergaptol methyltransferase; S-adenosyl-L-methionine:bergaptol O-methyltransferase; BMT; S-adenosyl-L-methionine:5-hydroxyfuranocoumarin 5-O-methyltransferase

### Product Information

#### Form

Liquid or lyophilized powder

#### EC Number

EC 2.1.1.69

#### CAS No.

67339-12-2, 101637-31-4

#### Reaction

(1) S-adenosyl-L-methionine + a 5-hydroxyfurocoumarin = S-adenosyl-L-homocysteine + a 5-methoxyfurocoumarin (general reaction); (2) S-adenosyl-L-methionine + bergaptol = S-adenosyl-L-homocysteine + bergaptene

#### 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.