

## F-actin monooxygenase

Cat. No. EXWM-0828

Lot. No. (See product label)

### Introduction

#### Description

The enzyme, characterized from the fruit fly *Drosophila melanogaster*, is a multi-domain oxidoreductase that acts as an F-actin disassembly factor. The enzyme selectively reduces two L-Met residues of F-actin, causing fragmentation of the filaments and preventing repolymerization. Free methionine is not a substrate. The reaction is stereospecific and generates the (R)-sulfoxide.

#### Synonyms

MICAL (gene name)

### Product Information

#### Form

Liquid or lyophilized powder

#### EC Number

EC 1.14.13.225

#### Reaction

[F-actin]-L-methionine + NADPH + O<sub>2</sub> + H<sup>+</sup> = [F-actin]-L-methionine-(R)-S-oxide + NADP<sup>+</sup> + H<sub>2</sub>O

#### 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.