Creative Enzymes®

# crotonyl-CoA carboxylase/reductase

*Cat. No. EXWM-1354*

*Lot. No.* (See product label)

## Introduction

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|---|---|
| ***Description*** | The reaction is catalysed in the reverse direction. This enzyme, isolated from the bacterium Rhodobacter sphaeroides, catalyses (E)-but-2-enoyl-CoA-dependent oxidation of NADPH in the presence of CO2. When CO2 is absent, the enzyme catalyses the reduction of (E)-but-2-enoyl-CoA to butanoyl-CoA, but with only 10% of maximal activity (relative to (E)-but-2-enoyl-CoA carboxylation). |
| ***Synonyms*** | CCR; crotonyl-CoA reductase (carboxylating) |

## Product Information

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|---|---|
| ***Form*** | Liquid or lyophilized powder |
| ***EC Number*** | EC 1.3.1.85 |
| ***Reaction*** | (2S)-ethylmalonyl-CoA + NADP+ = (E)-but-2-enoyl-CoA + CO2 + NADPH + H+ |
| ***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

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| ***Storage*** | Store it at +4 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃. |