Creative Enzymes®

# sucrose-phosphate synthase

*Cat. No. EXWM-2365*

*Lot. No.* (See product label)

## Introduction

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| ***Description*** | Requires Mg2+ or Mn2+ for maximal activity. The enzyme from Synechocystis sp. strain PCC 6803 is not specific for UDP-glucose as it can use ADP-glucose and, to a lesser extent, GDP-glucose as substrates. The enzyme from rice leaves is activated by glucose 6-phosphate but that from cyanobacterial species is not. While the reaction catalysed by this enzyme is reversible, the enzyme usually works in concert with EC 3.1.3.24, sucrose-phosphate phosphatase, to form sucrose, making the above reaction essentially irreversible. The F in sucrose 6F-phosphate is used to indicate that the fructose residue of sucrose carries the substituent. |
| ***Synonyms*** | UDP-glucose-fructose-phosphate glucosyltransferase; sucrosephosphate-UDP glucosyltransferase; UDP-glucose-fructose-phosphate glucosyltransferase; SPS; uridine diphosphoglucose-fructose phosphate glucosyltransferase; sucrose 6-phosphate synthase; sucrose phosphate synthetase; sucrose phosphate-uridine diphosphate glucosyltransferase; sucrose phosphate synthase |

## Product Information

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| ***Form*** | Liquid or lyophilized powder |
| ***EC Number*** | EC 2.4.1.14 |
| ***CAS No.*** | 9030-06-2 |
| ***Reaction*** | UDP-glucose + D-fructose 6-phosphate = UDP + sucrose 6F-phosphate |
| ***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 ℃. |