

malonyl-CoA reductase (malonate semialdehyde-forming)

Cat. No. EXWM-1177 Lot. No. (See product label)

Introduction	
Description	Requires Mg2+. Catalyses the reduction of malonyl-CoA to malonate semialdehyde, a key step in the 3-hydroxypropanoate and the 3-hydroxypropanoate/4- hydroxybutanoate cycles, autotrophic CO2 fixation pathways found in some green non-sulfur phototrophic bacteria and some thermoacidophilic archaea, respectively. The enzyme from Sulfolobus tokodaii has been purified, and found to contain one RNA molecule per two subunits. The enzyme from Chloroflexus aurantiacus is bifunctional, and also catalyses the next reaction in the pathway, EC 1.1.1.298 [3-hydroxypropionate dehydrogenase (NADP+)].
Synonyms	NADP-dependent malonyl CoA reductase; malonyl CoA reductase (NADP); malonyl CoA reductase (malonate semialdehyde-forming)
Product Information	
Form	Liquid or lyophilized powder
EC Number	EC 1.2.1.75
Reaction	malonate semialdehyde + CoA + NADP+ = malonyl-CoA + 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

Storage

Store it at +4 °C for short term. For long term storage, store it at -20 °C~-80 °C.