

3-hydroxypropionate dehydrogenase (NADP+)

Cat. No. EXWM-0207

Lot. No. (See product label)

Introduction

Description Catalyses the reduction of malonate semialdehyde to 3-hydroxypropanoate, 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 archaea, respectively. The enzyme from *Chloroflexus aurantiacus* is bifunctional, and also catalyses the upstream reaction in the pathway, EC 1.2.1.75. Different from EC 1.1.1.59 [3-hydroxypropionate dehydrogenase (NAD+)] by cofactor preference.

Synonyms 3-hydroxypropanoate dehydrogenase (NADP+); 3-hydroxypropionate:NADP+ oxidoreductase

Product Information

Form Liquid or lyophilized powder

EC Number EC 1.1.1.298

Reaction 3-hydroxypropanoate + NADP+ = malonate semialdehyde + 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.