

dihydroorotate dehydrogenase (NAD+)

Cat. No. EXWM-1288

Lot. No. (See product label)

Introduction

Description

Binds FMN, FAD and a [2Fe-2S] cluster. The enzyme consists of two subunits, an FMN binding catalytic subunit and a FAD and iron-sulfur binding electron transfer subunit. The reaction, which takes place in the cytosol, is the only redox reaction in the de-novo biosynthesis of pyrimidine nucleotides. Other class 1 dihydroorotate dehydrogenases use either fumarate (EC 1.3.98.1) or NADP+ (EC 1.3.1.15) as electron acceptor. The membrane bound class 2 dihydroorotate dehydrogenase (EC 1.3.5.2) uses quinone as electron acceptor.

Synonyms

orotate reductase (NADH); orotate reductase (NADH₂); DHodehase (ambiguous); DHOD (ambiguous); DHODase (ambiguous); dihydroorotate oxidase, pyrD (gene name)

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 1.3.1.14

CAS No.

37255-26-8

Reaction

(S)-dihydroorotate + NAD⁺ = orotate + NADH + 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.