Creative Enzymes®

aldos-2-ulose dehydratase

Cat. No. EXWM-4950

Lot. No. (See product label)

Introduction

Description	This enzyme catalyses two of the steps in the anhydrofructose pathway, which leads to the degradation of glycogen and starch via 1,5-anhydro-D-fructose. Aldose-2-uloses such as 2-dehydroglucose can also act as substrates, but more slowly. This is a bifunctional enzyme that acts as both a lyase and as an isomerase. Differs from EC 4.2.1.111, which can carry out only reaction (1a), is inhibited by its product and requires metal ions for activity.
Synonyms	pyranosone dehydratase; AUDH; 1,5-anhydro-D-fructose dehydratase (microthecin-forming)

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 4.2.1.110
CAS No.	101920-80-3
Reaction	1,5-anhydro-D-fructose = 2-hydroxy-2-(hydroxymethyl)-2H-pyran-3(6H)-one+ H2O (overall reaction); (1a) 1,5-anhydro-D-fructose = 1,5-anhydro-4-deoxy-D-glycero-hex-3-en-2-ulose + H2O; (1b) 1,5-anhydro-4-deoxy-D-glycero-hex-3-en-2-ulose = 2-hydroxy-2-(hydroxymethyl)-2H-pyran-3(6H)-one
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 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃.