

glucosamine ammonia-lyase

Cat. No. EXWM-5295

Lot. No. (See product label)

Introduction

Description Contains pyridoxal phosphate. The enzyme releases an unstable enamine product that tautomerizes to an imine form, which undergoes spontaneous hydrolytic deamination to form the final product.

Synonyms glucosaminic dehydrase; D-glucosamine dehydratase; D-glucosaminic acid dehydrase; aminodeoxygluconate dehydratase; 2-amino-2-deoxy-D-gluconate hydro-lyase (deaminating); aminodeoxygluconate ammonia-lyase; 2-amino-2-deoxy-D-gluconate ammonia-lyase; D-glucosamine ammonia-lyase; D-glucosamine ammonia-lyase (isomerizing; 2-dehydro-3-deoxy-D-gluconate-forming)

Product Information

Form Liquid or lyophilized powder

EC Number EC 4.3.1.9

CAS No. 37290-91-8

Reaction 2-amino-2-deoxy-D-gluconate = 2-dehydro-3-deoxy-D-gluconate + NH₃ (overall reaction); (1a) 2-amino-2-deoxy-D-gluconate = (2Z,4S,5R)-2-amino-4,5,6-trihydroxyhex-2-enoate + H₂O; (1b) (2Z,4S,5R)-2-amino-4,5,6-trihydroxyhex-2-enoate = (4S,5R)-4,5,6-trihydroxy-2-iminothexanoate (spontaneous); (1c) (4S,5R)-4,5,6-trihydroxy-2-iminothexanoate + H₂O = 2-dehydro-3-deoxy-D-gluconate + NH₃ (spontaneous)

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.