Creative Enzymes®

UDP-N-acetyl-2-amino-2-deoxyglucuronate dehydrogenase

Cat. No. EXWM-0249

Lot. No. (See product label)

Introduction

Description This enzyme participates in the biosynthetic pathway for UDP-α-D-ManNAc3NAcA (UDP-2,3-diacetamido-2,3-dideoxy-α-D-mannuronic acid), an important precursor of B-band lipopolysaccharide. The enzymes from Pseudomonas aeruginosa serotype O5 and Thermus thermophilus form a complex with the the enzyme catalysing the next step the pathway (EC 2.6.1.98, UDP-2-acetamido-2-deoxy-ribo-hexuluronate aminotransferase). The enzyme also possesses an EC 1.1.99.2 (L-2-hydroxyglutarate dehydrogenase) activity, and utilizes the 2-oxoglutarate produced by EC 2.6.1.98 to regenerate the tightly bound NAD+. The enzymes from Bordetella pertussis and Chromobacterium violaceum do not bind NAD+ as tightly and do not require 2-oxoglutarate to function.

Synonyms WlbA; WbpB

Product Information

Form Liquid or lyophilized powder

EC Number EC 1.1.1.335

Reaction UDP-N-acetyl-2-amino-2-deoxy-α-D-glucuronate + NAD+ = UDP-2-acetamido-2-deoxy-α-D-ribo-hex-3-uluronate + 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 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃.