Creative Enzymes®

GTP 3',8-cyclase

Cat. No. EXWM-4935

Lot. No. (See product label)

Introduction

Description The enzyme catalyses an early step in the biosynthesis of the molybdenum cofactor (MoCo). In bacteria and plants the reaction is catalysed by MoaA and Cnx2, respectively. In mammals it is catalysed by the MOCS1A domain of the bifunctional MOCS1 protein, which also catalyses EC 4.6.1.17, cyclic pyranopterin monophosphate synthase. The enzyme belongs to the superfamily of radical S-adenosyl-L-methionine (radical SAM) enzymes, and contains two oxygen-sensitive FeS clusters.

Synonyms MOCS1A (gene name); moaA (gene name); cnx2 (gene name)

Product Information

Form Liquid or lyophilized powder

EC Number EC 4.1.99.22

Reaction GTP + S-adenosyl-L-methionine + reduced electron acceptor = (8S)-3',8-cyclo-7,8-dihydroguanosine 5'-triphosphate + 5'-deoxyadenosine + L-methionine + oxidized electron acceptor

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 ℃.