EC 1 Oxidoreductases

EC 1.1 Acting on the CH-OH group of donors

EC 1.1.1 with NAD^+ or $NADP^+$ as acceptor

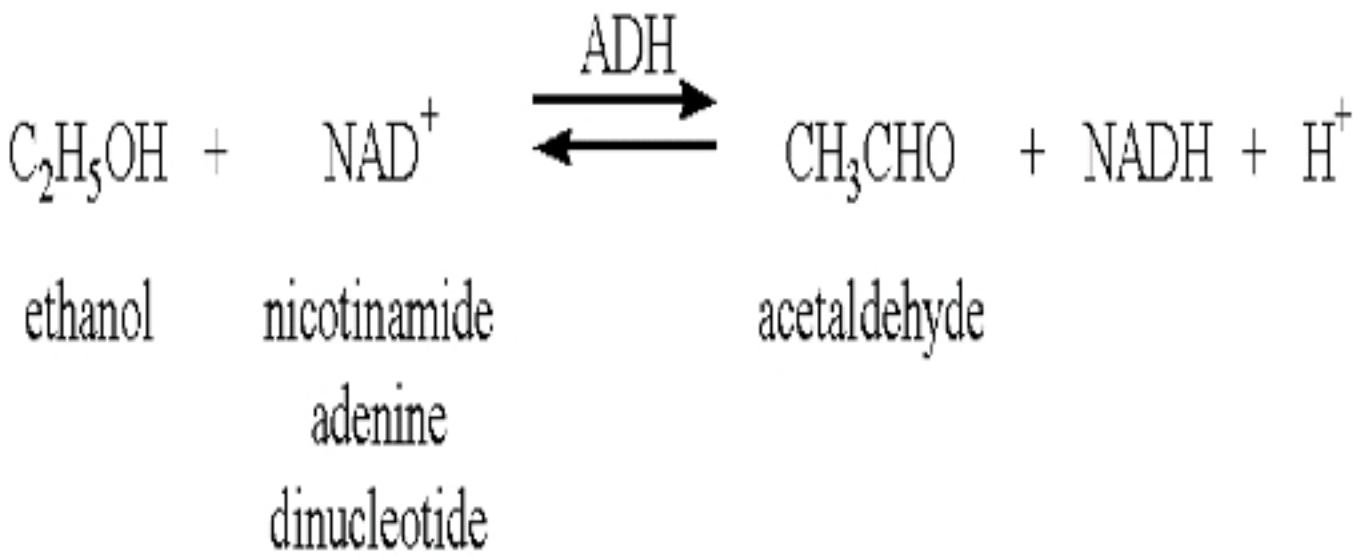
EC 1.1.1.1

Accepted name: alcohol dehydrogenase

Reaction: an alcohol + NAD^+ = an aldehyde or ketone + NADH + H^+

Other name(s): aldehyde reductase; ADH; alcohol dehydrogenase (NAD^+).

Systematic name: alcohol: NAD^+ Oxidoreductases



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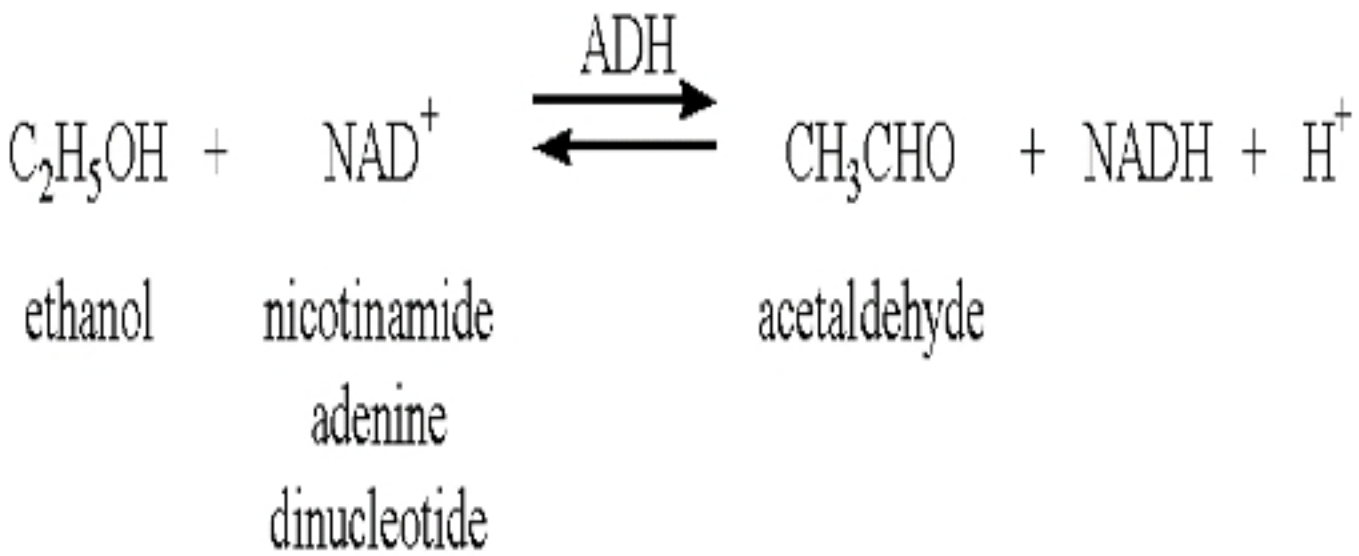


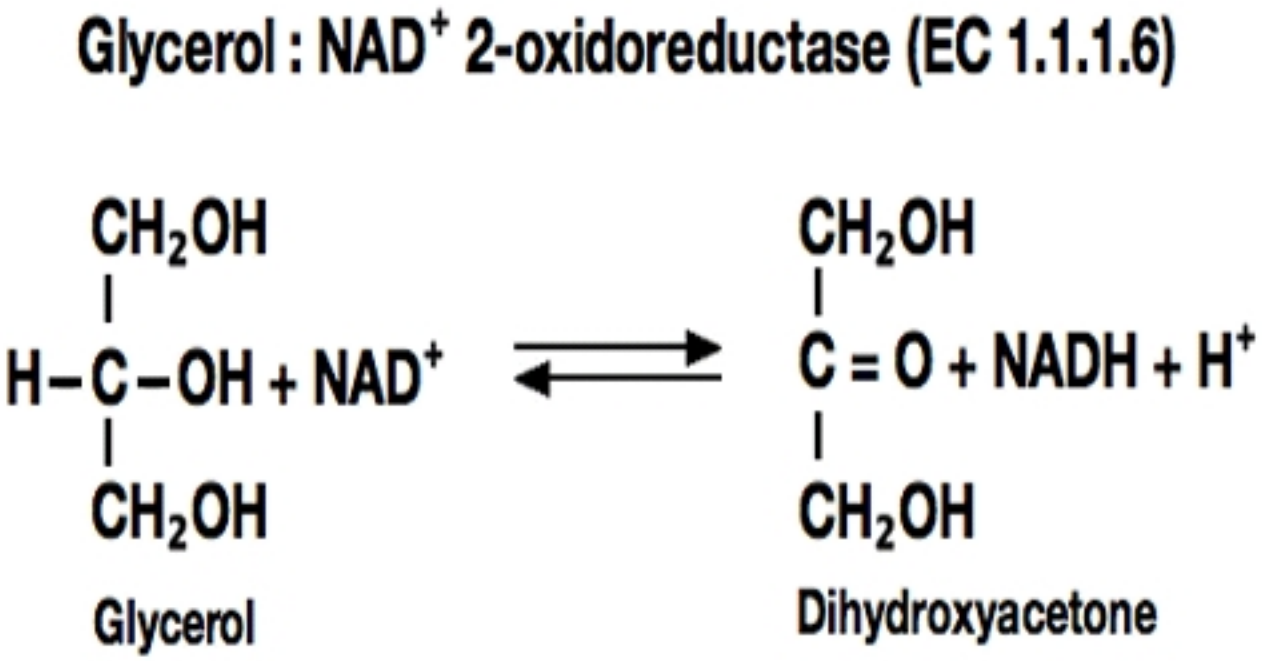
EC 1.1.1.6

Accepted name: glycerol dehydrogenase

Reaction: glycerol + NAD^+ = dihydroxyacetone + NADH + H^+

Other name(s): glycerin dehydrogenase; NAD-linked glycerol dehydrogenase.

Systematic name: Glycerol: NAD^+ 2-oxidoreductase



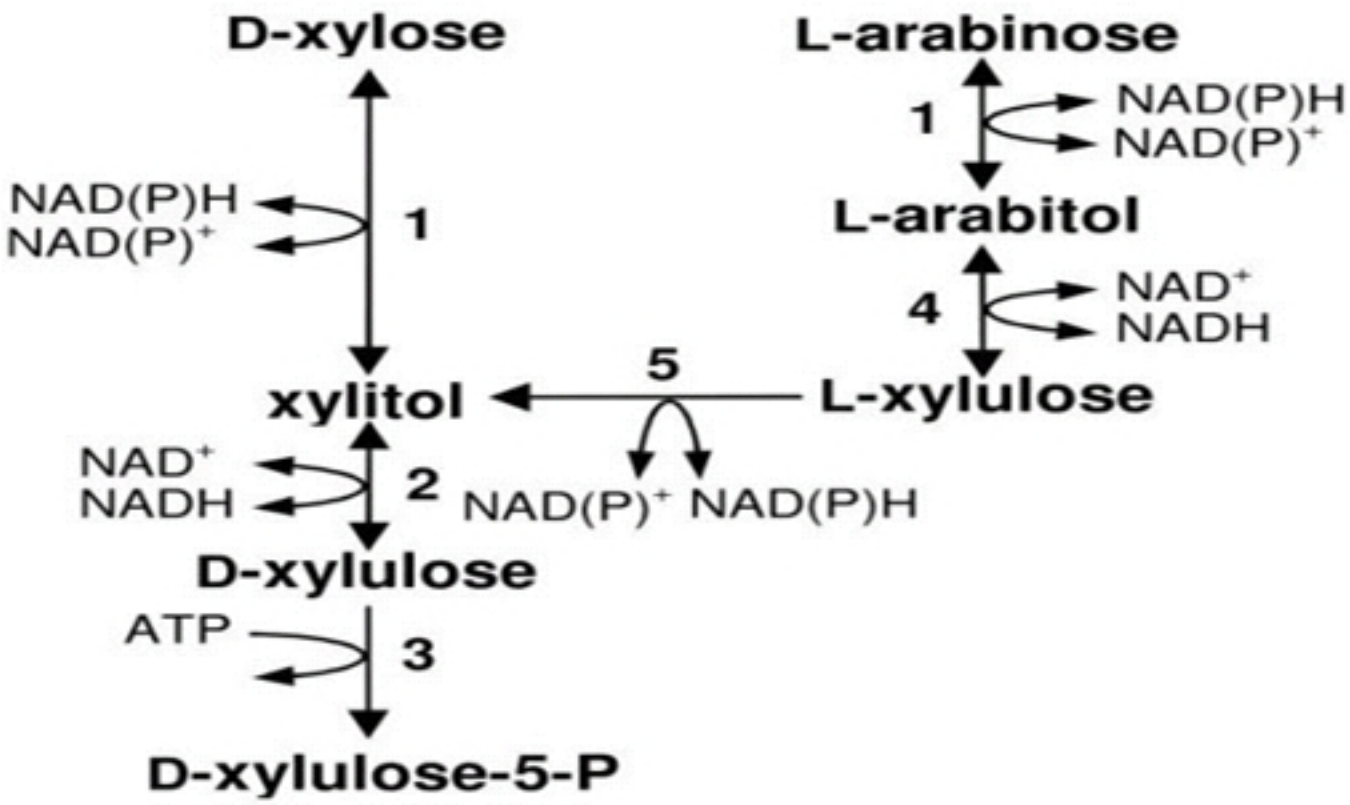
EC 1.1.1.9

Accepted name: D-xylulose reductase

Reaction: xylitol + NAD^+ = D-xylulose + NADH + H^+

Other name(s): NAD-dependent xylitol dehydrogenase; xylitol dehydrogenase; erythritol dehydrogenase.

Systematic name: xylitol: NAD^+ 2-oxidoreductase (D-xylulose-forming)



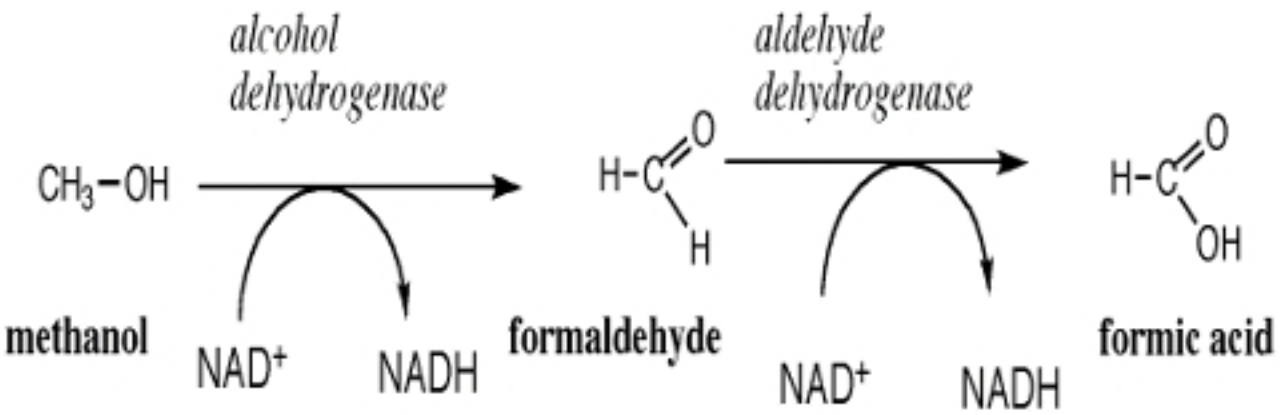
EC 1.1.2 with a cytochrome as acceptor

EC 1.1.2.7

Accepted name: methanol dehydrogenase (cytochrome *c*)

Reaction: a primary alcohol + 2 cytochrome *cI* = an aldehyde + 2 reduced cytochrome *cI*

Other name(s): methanol dehydrogenase (MDH).



Systematic name: methanol: cytochrome *c* oxidoreductase

EC 1.1.3 with oxygen as acceptor

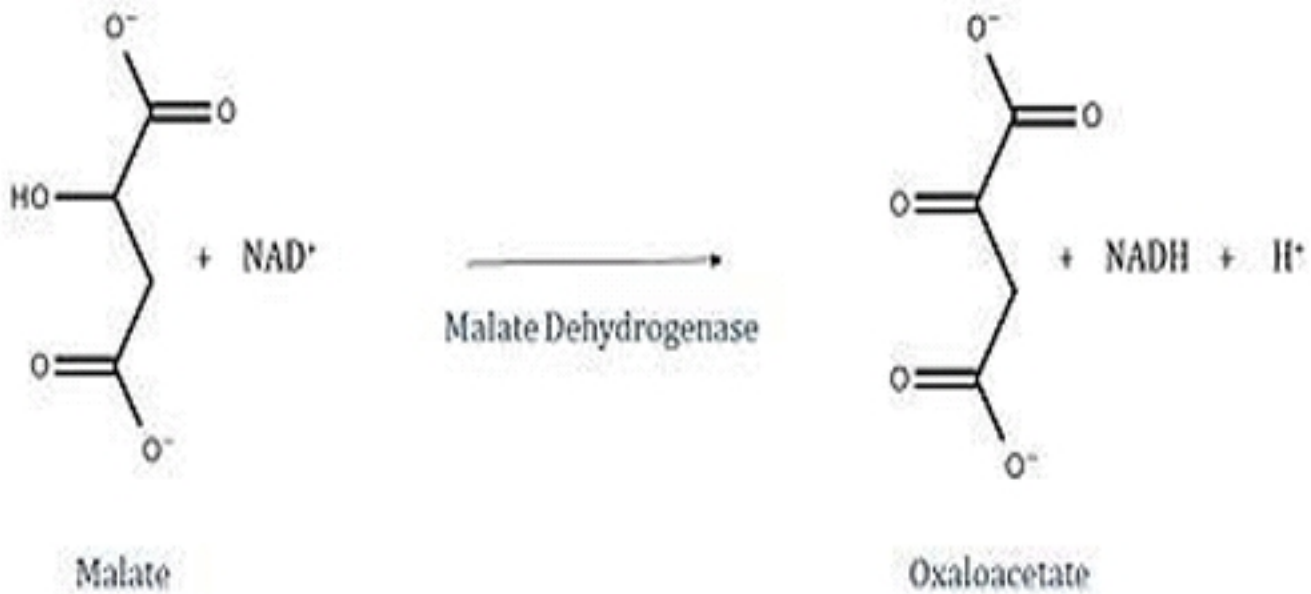
EC 1.1.3.3

Accepted name: malate oxidase

Reaction: (S)-malate + O_2 = oxaloacetate + H_2O_2

Other name(s): malic oxidase; malic dehydrogenase II

Systematic name: (S)-malate: oxygen oxidoreductase



EC 2 Transferases

EC 2.1 Transferring one-carbon groups

EC 2.1.1 Methyl Transferases

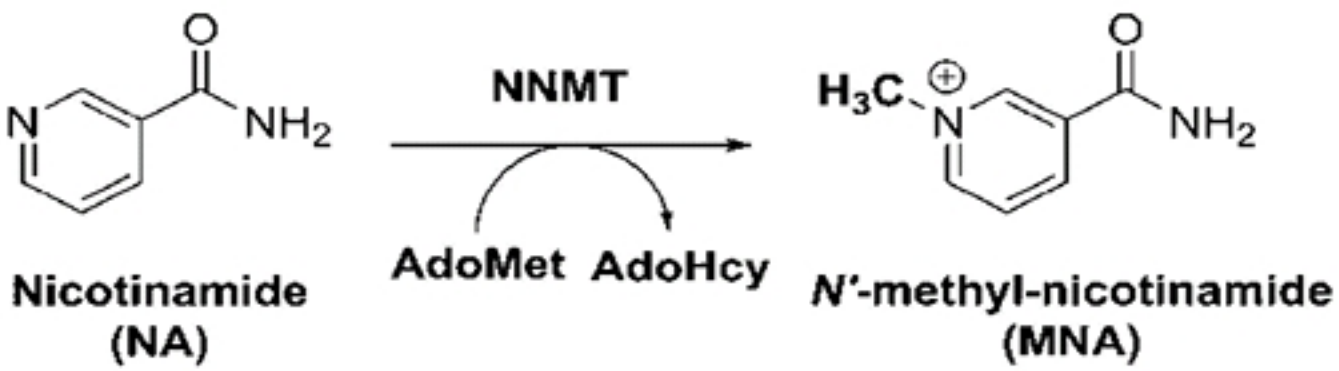
EC 2.1.1.1

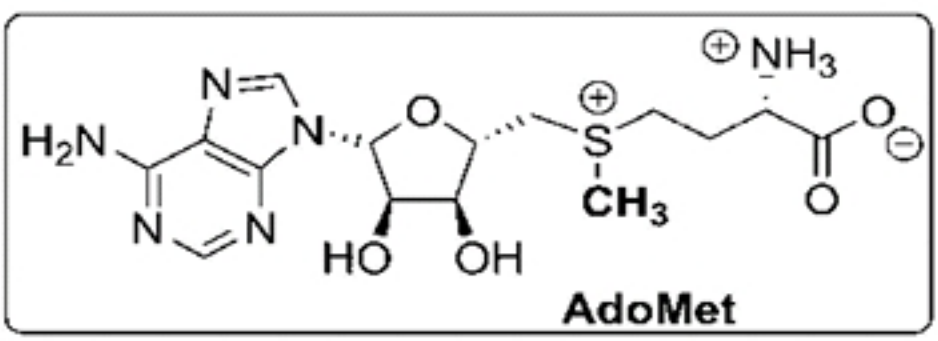
Accepted name: nicotinamide N-methyltransferase

Reaction: S-adenosyl-L-methionine + nicotinamide = S-adenosyl-L-homocysteine + 1-methylnicotinamide

Other name(s): nicotinamide methyltransferase

Systematic name: S-adenosyl-L-methionine:nicotinamide N-methyltransferase





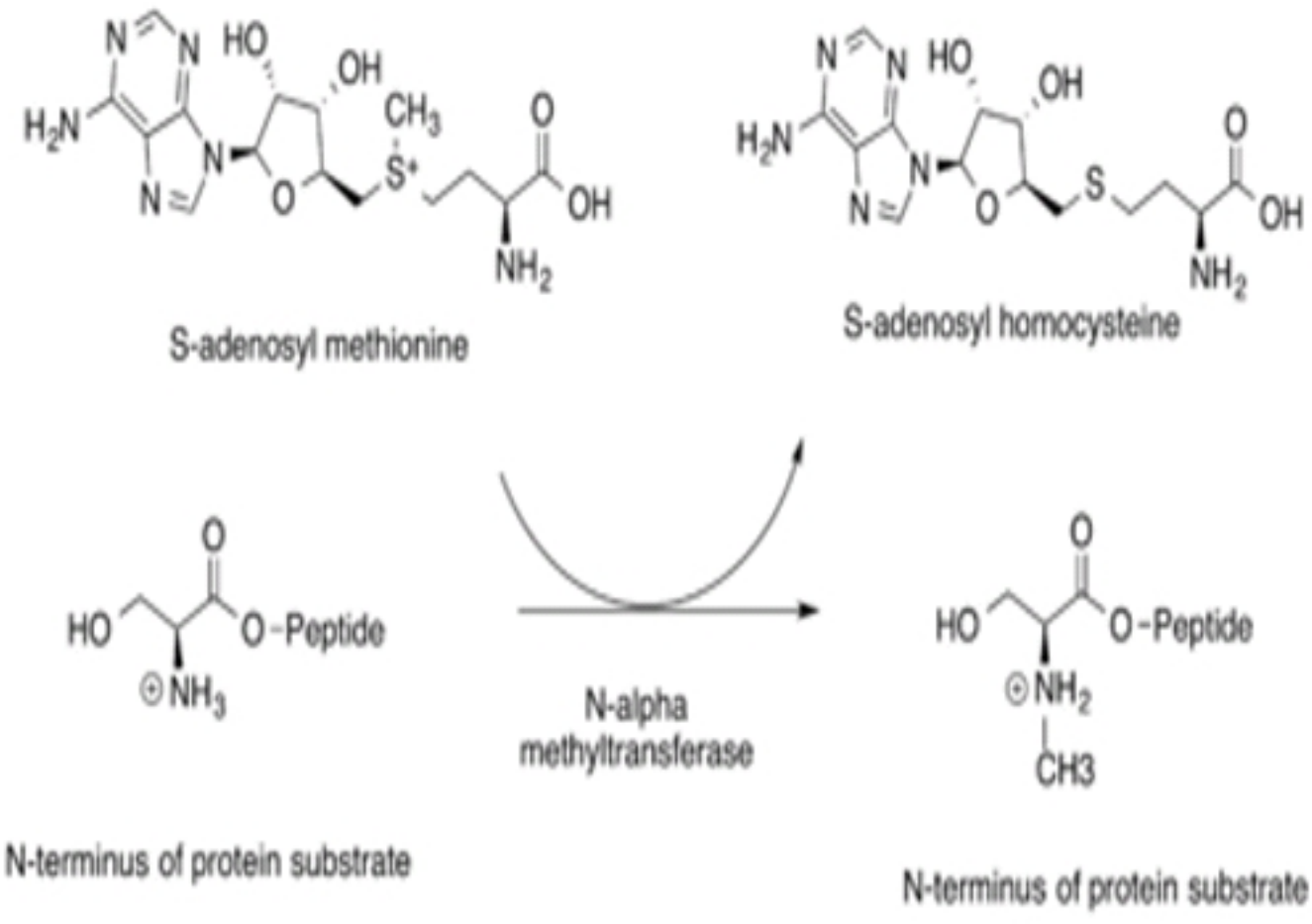
EC 2.1.1.9

Accepted name: thiol S-methyltransferase

Reaction: S-adenosyl-L-methionine + a thiol = S-adenosyl-L-homocysteine + a thioether

Other name(s): S-methyltransferase; thiol methyltransferase (TMT).

Systematic name: S-adenosyl-L-methionine: thiol S-methyltransferase.



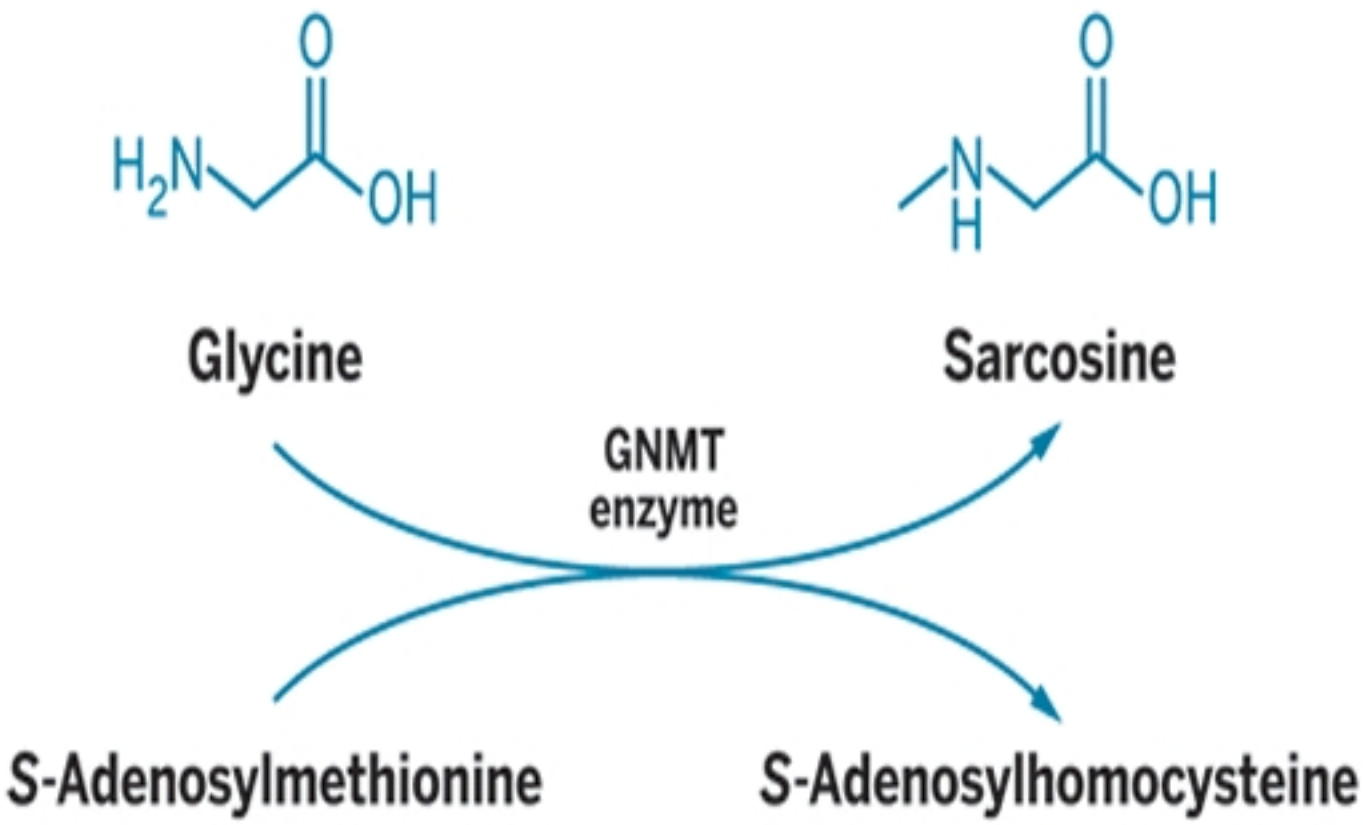
EC 2.1.1.20

Accepted name: glycine N-methyltransferase

Reaction: S-adenosyl-L-methionine + glycine = S-adenosyl-L-homocysteine + sarcosine

Other name(s): glycine methyltransferase (GNMT)

Systematic name: S-adenosyl-L-methionine: glycine N-methyltransferase



EC 2.1.3 Carboxy and carbamoyl transferases

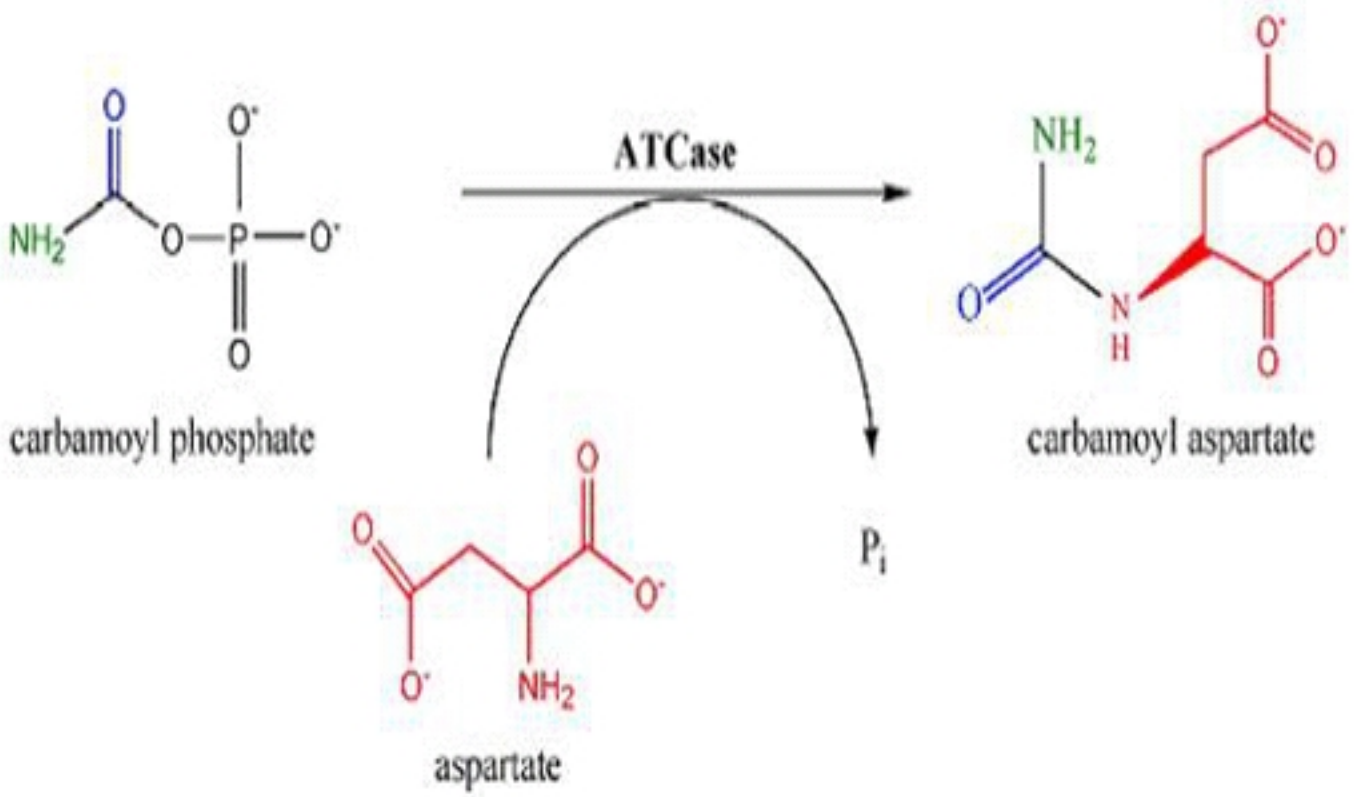
EC 2.1.3.2

Accepted name: aspartate carbamoyltransferase

Reaction: carbamoyl phosphate + L-aspartate = phosphate + N-carbamoyl-L-aspartate

Other name(s): carbamyl aspartotranskinase.

Systematic name: carbamoyl-phosphate: L-aspartate carbamoyl transferase.



EC 2.3 Acyltransferases

EC 2.3.1 Transferring groups other than aminoacyl groups

EC 2.3.1.1

Accepted name: amino-acid N-acetyltransferase

Reaction: acetyl-CoA + L-glutamate = CoA + N-acetyl-L-glutamate

Other name(s): N-acetylglutamate synthase (AGAS)

Systematic name: acetyl-CoA: L-glutamate N-acetyltransferase