

Acetyl-CoA pathway

The figure is a phylogenetic tree illustrating the distribution of methyl branch enzymes across bacterial and archaeal lineages. The tree is rooted at the bottom and branches upwards. Colored circles indicate the presence of specific genes: blue for bacterial fdhA, fdhB, Fhs, fold, metF, fwdA-F, ftr, mch, mtd, and mer; orange for archaeal fwdA-F, ftr, mch, mtd, and mer; and white for cdh gamma/acsC. The tree is color-coded by domain: green for Bacteria and cyan for Archaea.

cdh δ/acslD ○ ● cdh o/acslD

h (α/β)/acsB ○ cdh β

cdh 8

the following order:

porD ○ ● porD
porG ○ ● porG

The diagram illustrates the biosynthesis of C₁ cofactors. Folate and methanopterin are shown at the top, with arrows pointing down to their respective precursors: folE and mptA.

B O ● mptB
● mptD

folk ○ ● mptE

The diagram illustrates the genomic organization of the folic acid branch. On the left, four genes are listed: folP, folC, folA, and folM. To the right of each gene is a circle representing a promoter. A vertical line separates the genes from the promoters. Two promoters are filled blue and grouped together under the label "RFAP synt", while the other two are unfilled and grouped under the label "mptH".

Gene	Promoter
folP	Filled Blue
folC	Unfilled
folA	Unfilled
folM	Unfilled

Heterodisulfide reductases

HdrA	○	●	HdrA
HdrB	○	●	HdrB
HdrC	○	●	HdrC

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Hydrogenase

mvhD^a
mvhG

frhA ○ ○

frhB
frhD

frhG

[FeFe] hydA

hydB