

Supplementary Table 1: Listing of additional bacterial methylases that generate SAH.

Pathway	Enzyme involved	Reference
Cobinamide synthesis	Methyl and O-methyl transferases (EC 2.1.1.130 and EC 2.1.1.131)	(Roessner <i>et al.</i> , 1992)
Vitamin B12 synthesis	Cobalt-precorrin-2C(20)-methyltransferase (EC 2.1.1.151)	(Scott <i>et al.</i> , 1993)
Tetrapyrrole biosynthesis or Precorrin-2/heme d(1) synthesis	Uroporphyrinogen- or NirE Uroporphyrinogen III-methyltransferase (EC 2.1.1.107)	(Warren <i>et al.</i> , 1994, Lobo <i>et al.</i> , 2009, Storbeck <i>et al.</i> , 2009)
Chitooligosaccharide methylation	NodS N-methyltransferase	(Geelen <i>et al.</i> , 1993, Cakici <i>et al.</i> , 2008, Geelen <i>et al.</i> , 1995)
Albicidin biosynthesis	XabC O-methyltransferase	(Huang <i>et al.</i> , 2000)
Iodine methylations	Methyl halide transferase (EC 2.1.1.65)	(Amachi <i>et al.</i> , 2001)
Cyclopropanation	Methylene-fatty acyl-phospholipid synthase (EC 2.1.1.16)	(Glickman <i>et al.</i> , 2001, Rao <i>et al.</i> , 2005)
Cyclopropanation (Methylation of unsaturated FA)	Cyclopropane-fatty acyl-phospholipid synthase (EC 2.1.1.79)	(Budin-Verneuil <i>et al.</i> , 2005)
Biosynthesis of oxygenated-, keto- and methoxy mycolic acids	Methyltransferases	(Boissier <i>et al.</i> , 2006, Alahari <i>et al.</i> , 2009)
Bacteriochlorophyll c biosynthesis	BchU C-20 Methyltransferase	(Wada <i>et al.</i> , 2006, Gomez Maqueo Chew <i>et al.</i> , 2007)
Phenolic substrate methylation for antibiotic production	O-methyltransferase	(Hou <i>et al.</i> , 2007)
Biosynthesis of macrolide antibiotics	Macrocin O-methyltransferase (EC 2.1.1.101)	(Li <i>et al.</i> , 2009)
Phospholipid methylation	PmtA phospholipid N-methyltransferase (EC 2.1.1.17)	(Aktas & Narberhaus, 2009)
Biosynthesis of polyketides	Methyltransferases	(Zimmermann <i>et al.</i> , 2009, Li & Muller, 2009, Zhang & Tang, 2009, Zhan, 2009, Nakano <i>et al.</i> , 2009)