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CORRIGENDUM

5-Hydroxy-5,6-dihydro-apo-4,4′-lycopene and methyl 5-hydroxy-5,6-dihydro-apo-4,4′-lycopenoate, novel C_{30}-carotenoids produced by a mutant of marine bacterium *Halobacillus halophilus*

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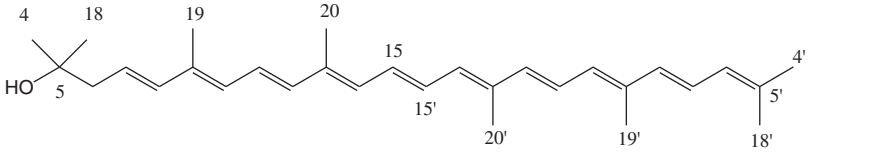
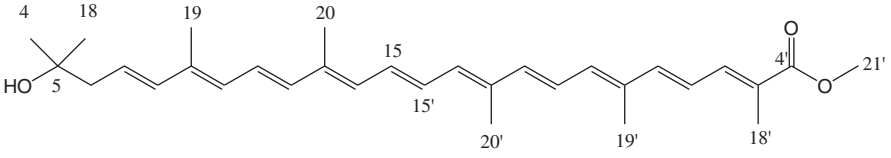
Correction to: *The Journal of Antibiotics* (2010) **63**: 291–295; doi:10.1038/ja.2010.33; published online 23 April 2010

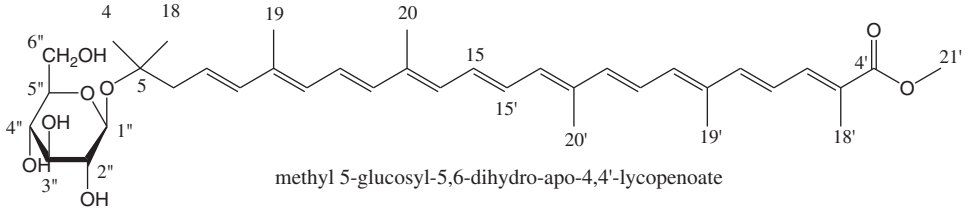
The authors of the above Article noted an error in publication of this paper in Figures 1–3 and Table 1. The corrected figures and table are shown below. Reflecting this correction, title of the article has been changed. Authors would like to apologize for the inconvenience caused.



5-hydroxy-5,6-dihydro-apo-4,4'-lycopene (**1**)



methyl 5-hydroxy-5,6-dihydro-apo-4,4'-lycopenoate (**2**)



methyl 5-glucosyl-5,6-dihydro-apo-4,4'-lycopenoate

Figure 1 The structure of carotenoids **1** and **2** produced by mutant OC1 (a mutant of *H. halophilus*), and methyl 5-glucosyl-5,6-dihydro-apo-4,4′-lycopenoate produced by *H. halophilus*.

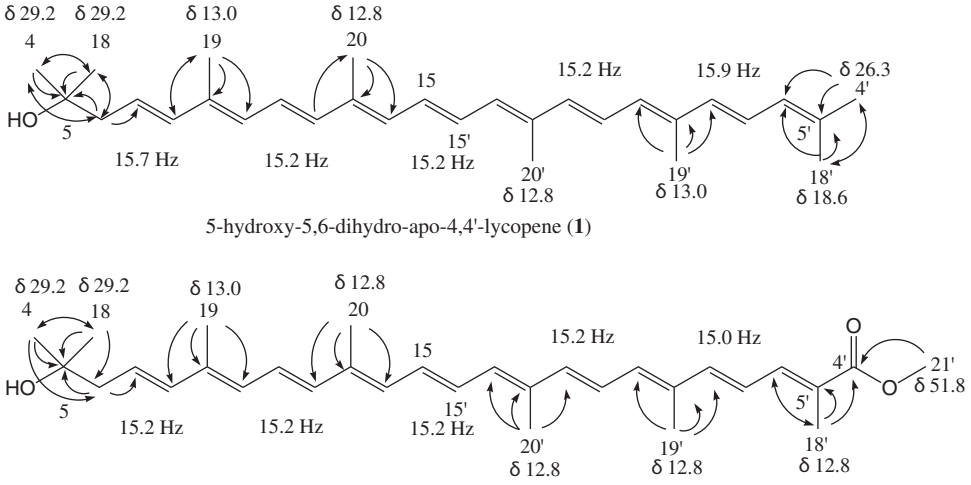


Figure 2 Key ^{1}H–^{13}C long-range couplings, *J* values, and δ_c values observed in the NMR analyses of **1** and **2**.

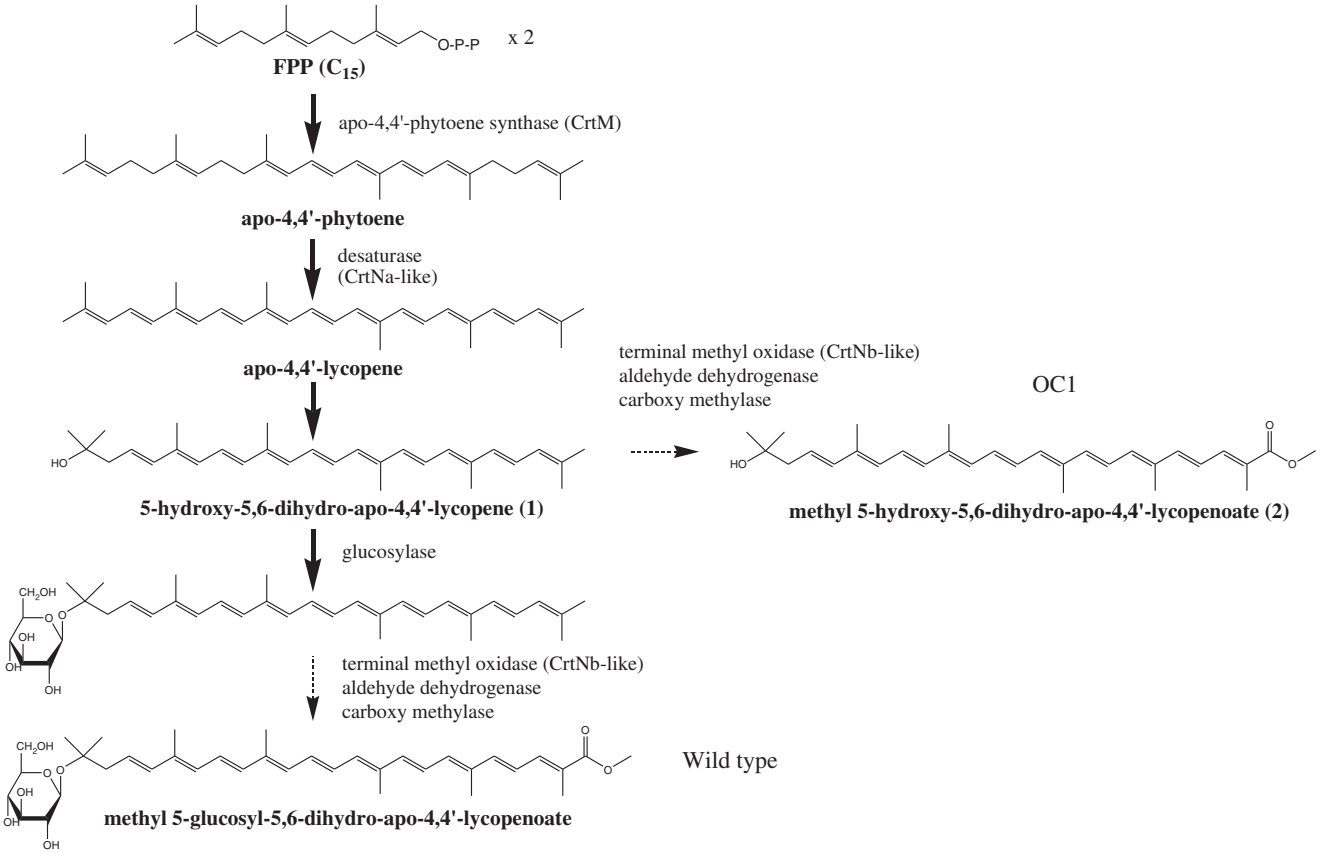


Figure 3 Proposed biosynthetic pathway of methyl 5-glucosyl-5,6-dihydro-apo-4,4′-lycopeonate in *H. halophilus* DSM2266.

Table 1 ^{1}H and ^{13}C NMR data for 5-hydroxy-5,6-dihydro-apo-4,4′-lycopene (1), methyl 5-hydroxy-5,6-dihydro-apo-4,4′-lycopenoate (2) and 2 peracetate [9] in $CDCl_3$

	1		*2*		*2 Peracetate*	
Position	δ_H	δ_C	δ_H	δ_C	δ_H	δ_C
4	1.24 (3H, s)	29.2 (CH_3)	1.24 (3H, s)	29.3 (CH_3)	1.17 (3H, s)	26.6 (CH_3)
5		71.0 (C)		71.0 (C)		78.8 (C)
6	2.31 (2H, d, 7.4)	47.5 (CH_2)	2.32 (2H, d,7.4)	47.5 (CH_2)	2.24 (1H, dd, 7.9, 13.8)	45.9 (CH_2)
					2.42 (1H, dd, 7.4, 13.8)	
7	5.76 (1H, ddd, 7.4, 7.4, 15.7)	124.5 (CH)	5.78 (1H, ddd, 7.4, 7.4, 15.7)	124.6 (CH)	5.72 (1H, ddd, 7.4, 7.9, 15.1)	125.2 (CH)
8	6.21 (1H, d, 15.7)	138.8 (CH)	6.21 (1H, d, 15.2)	138.8 (CH)	6.13 (1H, d, 15.1)	137.9 (CH)
9		135.0 (C)		135.0 (C)		135.5 (C)
10	6.14 (1H, d, 11.4)	131.2 (CH)	6.14 (1H, d, 10.9)	130.9 (CH)	6.08 (1H, d, 11.3)	130.9 (CH)
11	6.61 (1H, dd, 11.4, 15.2)	124.9 (CH)	6.62 (1H, dd, 10.9, 15.2)	125.1 (CH)	6.63 (1H, dd, 11.3, 14.4)	125.0 (CH)
12	6.35 (1H, d, 15.2)	137.8 (CH)	6.36 (1H, d, 15.2)	137.6 (CH)	6.35 (1H, d, 14.4)	137.4 (CH)
13		136.2 (C)[a]		136.3 (C)[a]		136.0 (C)[a]
14	6.25 (1H, d, 10.3)	132.7 (CH)[a]	6.24 (1H, d, 10.3)	132.5 (CH)	6.26 (1H, d, 9.7)	132.5 (CH)
15	6.63 (1H, dd, 10.3, 15.2)	130.0 (CH)[a]	6.65 (1H, dd, 10.3, 15.2)	131.2 (CH)	6.65 (1H, dd, 9.7, 15.2)	130.8 (CH)
18	1.24 (3H, s)	29.2 (CH_3)	1.26 (3H, s)	29.5 (CH_3)	1.19 (3H, s)	25.6 (CH_3)
19	1.93 (3H, s)	13.0 (CH_3)	1.94 (3H, s)	13.0 (CH_3)	1.91 (3H, s)	13.0 (CH_3)
20	1.97 (3H, s)	12.8 (CH_3)	1.98 (3H, s)	12.8 (CH_3)	1.98 (3H, s)	12.8 (CH_3)
4′	1.82 (3H, s)	26.3 (CH_3)		169.0 (C)		169.1 (C)
5′		135.8 (C)		125.7 (C)		125.7 (C)
6′	5.94 (1H, d, 10.8)	126.1 (CH)	7.30 (1H, d, 12.3)	139.1 (CH)	7.30 (1H, d, 11.3)	139.1 (CH)
7′	6.47 (1H, dd, 10.8, 15.9)	124.7 (CH)	6.52 (1H, dd, 12.3, 15.0)	122.9 (CH)	6.51 (1H, dd, 11.3, 15.1)	122.9 (CH)
8′	6.21 (1H, d, 15.9)	135.0 (CH)	6.66 (1H, d, 15.0)	144.2 (CH)	6.62 (1H, d, 15.1)	144.2 (CH)
9′		136.6 (C)[a]		135.2 (C)[a]		135.1 (C)
10′	6.18 (1H, d, 12.0)	131.4 (CH)	6.32 (1H, d, 11.9)	136.2 (CH)	6.35 (1H, d, 11.4)	136.2 (CH)
11′	6.63 (1H, m)	125.2 (CH)	6.63 (1H, dd, 11.9, 15.2)	125.1 (CH)	6.63 (1H, dd, 11.4, 15.0)	125.0 (CH)
12′	6.35 (1H, d, 15.2)	137.3 (CH)	6.45 (1H, d, 15.2)	139.9 (CH)	6.45 (1H, d, 15.0)	139.9 (CH)
13′		136.3 (C)[a]		136.0 (C)		137.0 (C)[a]
14′	6.25 (1H, d, 12.0)	132.5 (CH)[a]	6.29 (1H, d, 11.0)	134.1 (CH)	6.31 (1H, d, 11.4)	134.1 (CH)
15′	6.63 (1H, dd, 12.0, 15.2)	130.2 (CH)[a]	6.63 (1H, dd, 11.0, 15.2)	129.9 (CH)	6.63 (1H, dd, 11.4, 15.2)	129.9 (CH)
18′	1.82 (3H, s)	18.6 (CH_3)	2.00 (3H, s)	12.8 (CH_3)	2.00 (3H, s)	12.8 (CH_3)
19′	1.97 (3H, s)	13.0 (CH_3)	2.00 (3H, s)	12.8 (CH_3)	2.00 (3H, s)	12.8 (CH_3)
20′	1.97 (3H, s)	12.8 (CH_3)	2.00 (3H, s)	12.8 (CH_3)	1.98 (3H, s)	12.8 (CH_3)
$COOCH_3$			3.77 (3H, s)	51.8 (CH_3)	3.77 (3H, s)	51.7 (CH_3)
1″					4.69 (1H, d, 7.8)	93.4 (CH)
2″					4.98 (1H, dd, 7.8, 9.5)	71.6 (CH)
3″					5.24 (1H, dd, 9.0, 9.5)	73.1 (CH)
4″					5.04 (1H, dd, 9.0, 10.0)	68.9 (CH)
5″					3.68 (1H, ddd, 1.5, 5.8, 10.0)	71.6 (CH)
6″					4.10 (1H, dd, 1.5, 12.1)	62.5 (CH_2)
					4.22 (1H, dd, 5.8, 12.1)	
					4.22 (1H, dd, 5.8, 12.1)	

^{13}C signals of acetyl groups in **2** peracetate were observed at $\delta = 20.6$–20.7 (CH_3) and $\delta = 169.0$–170.6 (C=O).
[a]Interchageable.