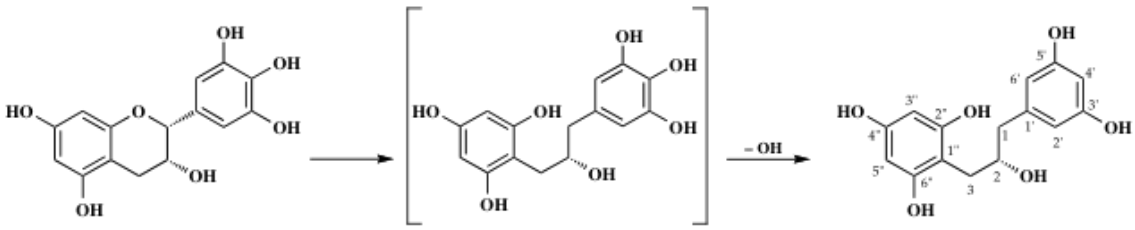
Epigallocatechin



(-)-(2*R*, 3*R*)-Epigallocatechin (1)　　2

Transformation of epigallocatechin by a human intestinal bacterium *Eubacterium* sp. strain SDG-2

代謝実験

腸内細菌代謝　ヒト腸内細菌分離株 *Eubacterium* sp. strain SDG-2

Incubation of (-)-epigallocatechin (1) with *Eubacterium* sp. strain SDG-2

(-)-Epigallocatechin (**1**) (30 mg each in 2 ml MeOH) was added to a bacterial suspension and incubated anaerobically for 36 h. The respective reaction mixtures were then treated as usual to give **2** (12 mg). [Wang *et al*., *Chem. Pharm. Bull*., **49**, 1640-1643 (2001)]

Compound 2, Amorphous powder, $[\alpha]_D^{25}$ –20.0° (*c* 0.1, MeOH).EI–MS *m/z* : 292 $[M]^+$. ^{1}H-NMR (MeOH-d_4) δ: 2.48 (1H, dd, *J*=13.8, 8.7 Hz, H-1a), 2.57 (1H, dd, *J*=13.7, 3.6 Hz, H-1b), 2.58 (1H, dd, *J*=14.2, 7.3 Hz, H-3a), 2.84 (1H, dd, *J*=14.2, 4.6 Hz, H-3b), 3.90 (1H, dddd, *J*=8.7, 7.3, 4.6, 3.6 Hz, H-2), 5.78 (2H, br s, H-3″, 5″), 6.00 (1H, t, *J*=2.2 Hz, H-4′), 6.09 (2H, d, *J*=2.2, 1.0 Hz, H-2′, 6′). ^{13}C-NMR (MeOH-d_4) δ: 31.7 (C-3), 44.5 (C-1), 75.0 (C-2), 95.9 (C-3″, 5″), 101.3 (C-4′), 109.1 (C-2′, 6′), 143.3 (C-1′), 157.7 (C-2″, 6″), 158.2 (C-4″), 159.1 (C-3′, 5′). [Wang *et al*., *Chem. Pharm. Bull*., **49**, 1640-1643 (2001)]

参考文献

1)　Wang L., Meselhy M. R., Li Y., Nakamura N., Min B., Qin G. and Hattori M.: The

heterocyclic ring fission and dehydroxylation of catechins and related compounds by *Eubacterium* sp. strain SDG-2, a human intestinal bacterium. *Chem. Pharm. Bull*., **49**, 1640-1643 (2001).