Genistein

Metabolism of genistein by human intestinal bacterium strain DZE

A bacterial suspension (50 ml) of strain DZE was inoculated to 0.8 1 GAM broth containing genistein (50 mg) and incubated at 37 °C in an anaerobic incubator for 120 h. The reaction mixture was then extracted three times with ethyl acetate. The organic layer was evaporated under reduced pressure to give a residue. The residue was applied to a column of silica gel, which was eluted with a solvent system, CHCl3–MeOH (20: 1), to give 5-hydroxyequol (24 mg, 50% in yield).

代謝実験

腸内細菌代謝 strain PUE 化合物の性状

5-Hydroxyequol

Amorphorus powder. EI-MS m/z: 258 [M]⁺. [α]23 D -9.0 $^{\circ}$ (c=0.256, MeOH).