



>>Entry Name: Methylophiopogonone B

Synonym(s): 5,7-Dihydroxy-3-[(4-methoxyphenyl)methyl]-6,8-dimethyl-4*H*-1-benzopyran-4-one, 9Cl. 5,7-Dihydroxy-3-(4-methoxybenzyl)-6,8-dimethyl-4-chromenone

CAS Registry Number: 74805-89-3

As Methylophiopogonone A, [KPR27-Y](#) with
R = H, R' = OMe

Molecular Formula: C₁₉H₁₈O₅

Molecular Weight: 326.348

Accurate Mass: 326.115425

Percentage Composition: C 69.93%; H 5.56%; O 24.51%

Biological Source: Constit. of *Ophiopogon japonicus* and *Ophiopogon ohwii*

Physical Description: Pale yellow needles (EtOH)

Melting Point: Mp 219-220°

>>Derivative: 2,3-Dihydro

Synonym(s): Methylophiopogonanone B

CAS Registry Number: 74805-91-7

Molecular Formula: C₁₉H₂₀O₅

Molecular Weight: 328.364

Accurate Mass: 328.131075

Percentage Composition: C 69.50%; H 6.14%; O 24.36%

Biological Source: From *Ophiopogon japonicus*

Physical Description: Needles (CCl₄)

Melting Point: Mp 159-160°

Optical Rotation: [α]_D¹⁷ -53 (c, 1 in dioxan)

>>Derivative: 2,3-Dihydro, 1"-oxo

Synonym(s): 6-Formylisoophiopogonanone B

CAS Registry Number: 88700-30-5

Molecular Formula: C₁₉H₁₈O₆

Molecular Weight: 342.348

Accurate Mass: 342.11034

Percentage Composition: C 66.66%; H 5.30%; O 28.04%

Biological Source: From *Ophiopogon japonicus* and *Ophiopogon ohwii*

Physical Description: Needles (MeOH/CHCl₃)

Melting Point: Mp 141°

Optical Rotation: [α]_D²¹ -10.4 (c, 0.24 in CHCl₃)

>>Derivative: 2,3-Dihydro, 1"-oxo, 7-Me ether

Synonym(s): 7-*O*-Methyl-6-formylisoophiopogonanone B

CAS Registry Number: 88700-32-7

Molecular Formula: C₂₀H₂₀O₆

Molecular Weight: 356.374

Accurate Mass: 356.12599

Percentage Composition: C 67.41%; H 5.66%; O 26.94%

Biological Source: From *Ophiopogon japonicus*

Melting Point: Mp 93°

Optical Rotation: [α]_D -47.4 (c, 0.5 in CHCl₃)

References:

Tada, A. *et al.*, *Chem. Pharm. Bull.*, 1980, **28**, 1477

Kaneda, N. *et al.*, *Yakugaku Zasshi*, 1983, **103**, 1133, (*derivs*)

Watanabe, Y. *et al.*, *Chem. Pharm. Bull.*, 1985, **33**, 5358, (*deriv*)