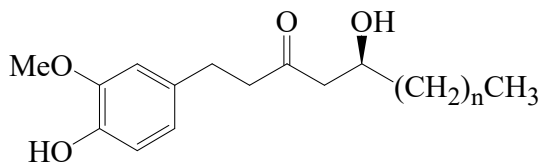
>>**Entry Name: [6]-Gingerol**
ENTRY UNDER REVIEW
Synonym(s): 5-Hydroxy-1-(4-hydroxy-3-methoxyphenyl)-3-decanone, 9Cl



(*S*)-*form*

n = 4

Related CAS Registry Numbers(s): 23513-08-8 23513-15-7 41743-67-3 41743-68-4 41743-69-5 99742-03-7

Molecular Formula: $C_{17}H_{26}O_4$
Molecular Weight: 294.39
Accurate Mass: 294.18311
Percentage Composition: C 69.36%; H 8.90%; O 21.74%

Gingerols have also been isol.

>>**Variant:** (*R*)-form

Molecular Formula: $C_{17}H_{26}O_4$
Molecular Weight: 294.39
Accurate Mass: 294.18311
Percentage Composition: C 69.36%; H 8.90%; O 21.74%
Physical Description: Yellow oil
Optical Rotation: $[\alpha]_D$ –25.1 (c, 1 in $CHCl_3$)

>>**Variant:** (*S*)-form

CAS Registry Number: 23513-14-6

Molecular Formula: $C_{17}H_{26}O_4$
Molecular Weight: 294.39
Accurate Mass: 294.18311
Percentage Composition: C 69.36%; H 8.90%; O 21.74%
Biological Source: Constit. of ginger *Zingiber officinale*
Physical Description: Pungent yellow oil
Optical Rotation: $[\alpha]_D$ +26.5 (c, 1 in $CHCl_3$)
UV: [neutral] λ_{max} 282 (ε 2560) (MeOH) (Berdy) [neutral] λ_{max} 211 (); 282 () (EtOH) (Berdy)

>>**Derivative:** Me ether
Synonym(s): Methylgingerol

Molecular Formula: $C_{18}H_{28}O_4$
Molecular Weight: 308.417
Accurate Mass: 308.19876
Percentage Composition: C 70.10%; H 9.15%; O 20.75%
Biological Source: Present in ginger
Physical Description: Cryst. (hexane/C_6H_6)
Melting Point: Mp 65.5-66°
Optical Rotation: $[\alpha]_D^{23}$ +28.4 (c, 2 in $CHCl_3$)

References:

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Denniff, P. *et al.*, *J.C.S. Perkin 1*, 1980, 2637, *(biosynth)*
Giovanni, B.P. *et al.*, *J.C.S. Perkin 1*, 1982, 2983, *(synth)*
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Solladie, G. *et al.*, *J.O.C.*, 1993, **58**, 2181, *(synth, bibl)*
Fleming, S.A. *et al.*, *Synth. Commun.*, 1999, **29**, 1933-1939, *(synth, pmr, cmr)*