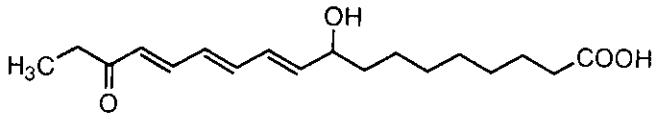
[基原]*Corchorus olitorius*
[性状]粉末
[比旋光度]:[α]$_D^{26}$ +13 (c, 0.4 in Me_2CO)
UV: [neutral] λ $_{max}$ 310 (log ε 4.6) (MeOH)
[その他のデータ]Isol. as a partial racemate of 60% op

----------文 献----------

Yoshikawa, M. et al., Chem. Pharm. Bull., 1998, 46, 1008-1014, (分離, UV, IR, H-NMR, C13-NMR, Mass)

§ 9-Hydroxy-16-oxo-10,12,14-octadecatrienoic acid; (10*E*,12*Z*,14*E*)-(+)-form
[化学名・別名]Corchorifatty acid C
[化合物分類]脂肪族化合物(Unbranched alkenic carboxylic acids and lactones), 脂肪族化合物(Oxylipins (including Eicosanoids))
[構造式]

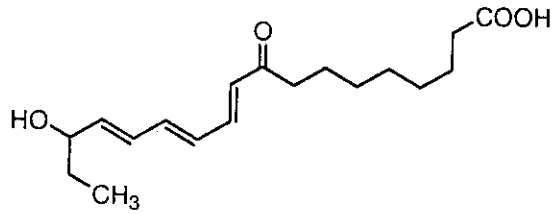


[分子式]$C_{18}H_{28}O_4$
[分子量]308.417
[基原]*Corchorus olitorius*
[性状]粉末
[比旋光度]:[α]$_D^{24}$ +12.9 (c, 0.2 in Me_2CO)
UV: [neutral] λ $_{max}$ 311 (log ε 4.4) (MeOH)

----------文 献----------

Yoshikawa, M. et al., Chem. Pharm. Bull., 1998, 46, 1008-1014, (分離, UV, IR, H-NMR, C13-NMR, Mass)

§ 16-Hydroxy-9-oxo-10,12,14-octadecatrienoic acid; (10*E*,12*E*,14*E*,16*S*)-form
[化学名・別名]Corchorifatty acid B
[化合物分類]脂肪族化合物(Oxylipins (including Eicosanoids)), 脂肪族化合物(Unbranched alkenic carboxylic acids and lactones)
[構造式]

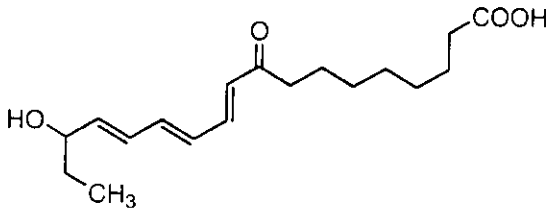


[分子式]$C_{18}H_{28}O_4$
[分子量]308.417
[基原]*Corchorus olitorius*
[性状]粉末
[比旋光度]:[α]$_D^{28}$ +17.3 (c, 0.2 in Me_2CO)
UV: [neutral] λ $_{max}$ 309 (log ε 4.3) (MeOH)

----------文 献----------

Bernart, M.W. et al., Phytochemistry, 1993, 56, 245, (分離, 構造)
Yoshikawa, M. et al., Chem. Pharm. Bull., 1998, 46, 1008-1014, (分離, UV, IR, H-NMR, C13-NMR, Mass)

§ 16-Hydroxy-9-oxo-10,12,14-octadecatrienoic acid; (10*E*,12*Z*,14*E*,16*S*)-form
[化学名・別名]Corchorifatty acid D
[化合物分類]脂肪族化合物(Unbranched alkenic carboxylic acids and lactones), 脂肪族化合物(Oxylipins (including Eicosanoids))
[構造式]



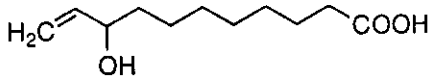
[分子式]$C_{18}H_{28}O_4$
[分子量]308.417
[基原]*Corchorus olitorius*
[性状]粉末
[比旋光度]:[α]$_D^{26}$ +19.7 (c, 0.04 in Me_2CO)
UV: [neutral] λ $_{max}$ 311 (log ε 4.3) (MeOH)

----------文 献----------

Bernart, M.W. et al., Phytochemistry, 1993, 56, 245, (分離, 構造)
Yoshikawa, M. et al., Chem. Pharm. Bull., 1998, 46, 1008-1014, (分離, UV, IR, H-NMR, C13-NMR, Mass)

§ 9-Hydroxy-10-undecenoic acid; (*S*)-form
[化合物分類]脂肪族化合物(Unbranched alkenic carboxylic acids and lactones)
[構造式]
[分子式]$C_{11}H_{20}O_3$

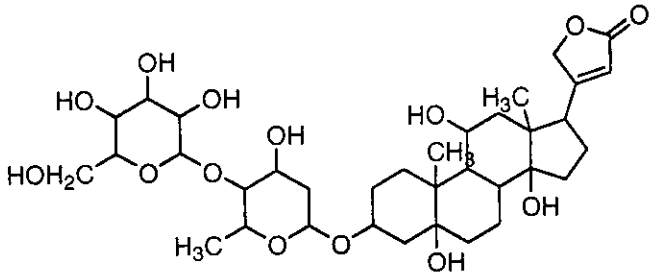
[分子量]200.277
[基原]*Corchorus olitorius*
[性状]オイル
[比旋光度]:[α]$_D^{24}$ -14.2 (c, 0.7 in $CHCl_3$) (約 57% op)



文献

Yoshikawa, M. et al., Chem. Pharm. Bull., 1998, 46, 1008-1014, (分離, IR, H-NMR, C13-NMR)

§ 3,5,11,14-Tetrahydroxycard-20(22)-enolide; (3 β,5 β,11 α,14 β)-form, 3-*O*-[β-D-Glucopyranosyl-(1 → 4)-2,6-dideoxy-β-D-*ribo*-hexopyranoside]
[化学名・別名]Corchorusoside A
[CAS No.]210637-15-3
[化合物分類]ステロイド(Cardanolide steroids). (C23).
[構造式]

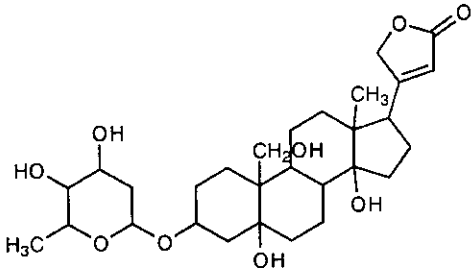


[分子式]$C_{35}H_{54}O_{14}$
[分子量]698.803
[基原]*Corchorus olitorius*
[性状]粉末
[比旋光度]:[α]$_D^{24}$ +12.8
UV: [neutral] λ $_{max}$ 218 (log ε 4.2) (MeOH)

文献

Yoshikawa, M. et al., Heterocycles, 1998, 48, 869-873, (Corchorusoside A)

§ 3,5,14,19-Tetrahydroxycard-20(22)-enolide; (3 β,5 β,14 β)-form, 3-*O*-(2,6-Dideoxy-β-D-*xylo*-hexopyranoside)
[化学名・別名]Corchorosol A
[CAS No.]23838-13-3
[化合物分類]ステロイド(Cardanolide steroids). (C23).
[構造式]

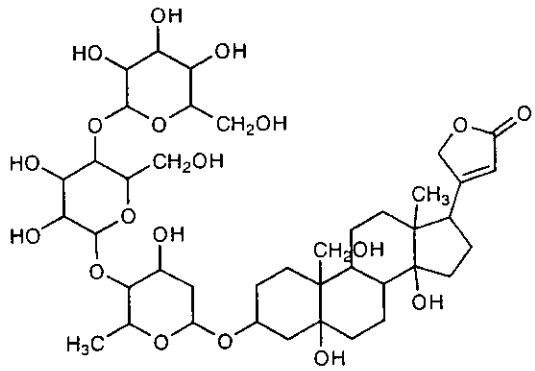


[分子式]$C_{29}H_{44}O_9$
[分子量]536.661
[基原]*Corchorus olitorius*

文献

Rao, E. et al., Curr. Sci., 1973, 42, 731; CA, 80, 80068t, (Corchorosol A)
Yoshikawa, M. et al., Heterocycles, 1998, 48, 869-873, (Corchorusoside E)

§ 3,5,14,19-Tetrahydroxycard-20(22)-enolide; (3 β,5 β,14 β)-form, 3-*O*-[β-D-Glucopyranosyl-(1 → 4)-β-D-glucopyranosyl-(1 → 4)-2,6-dideoxy-β-D-*xylo*-hexopyranoside]
[化学名・別名]Corchorusoside E
[CAS No.]210637-19-7
[化合物分類]ステロイド(Cardanolide steroids). (C23).
[構造式]



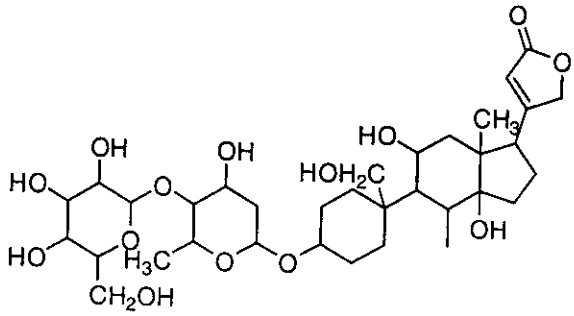
[分子式]$C_{41}H_{64}O_{19}$
[分子量]860.945
[基原]*Corchorus olitorius*
[性状]粉末
[比旋光度]:[α]$_D^{26}$ -12.1 (c, 1.2 in MeOH)

文献

Yoshikawa, M. et al., Heterocycles, 1998, 48, 869-873, (Corchorusoside E)

§ 3,11,14,19-Tetrahydroxycard-20(22)-enolide; (3 β,5 β,11 α)-form, 3-*O*-[β-D-Glucopyranosyl-(1 → 4)-2,6-dideoxy-β-D-*ribo*-hexopyranoside]
[化学名・別名]Corchorusoside D

[CAS No.]210637-18-6
[化合物分類]ステロイド
(Cardanolide steroids). (C23).
[構造式]

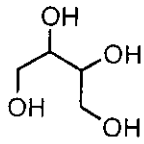


[分子式]$C_{35}H_{54}O_{14}$
[分子量]698.803
[基原]*Corchorus olitorius*
[性状]粉末
[比旋光度]:[α]$_D^{25}$ -5.1 (c, 0.3 in MeOH)
UV: [neutral] λ $_{max}$ 217 (log ε 4.2) (MeOH)

----------文 献----------

Roberts, K.D. et al., Helv. Chim. Acta, 1966, 49, 316
Yoshikawa, M. et al., Heterocycles, 1998, 48, 869-873, (Corchorusoside D)

§ Threitol; (2*R*,3*R*)-form
[化学名・別名]D-form
[CAS No.]2418-52-2
[化合物分類]炭水化物(Tetritols)
[構造式]

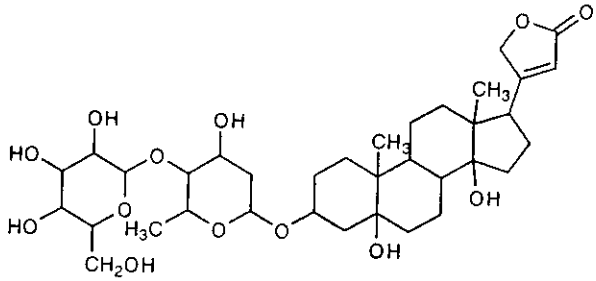


[分子式]$C_4H_{10}O_4$
[分子量]122.121
[基原]食用カビ*Armillaria mellea*に見られる. ジュート(*Corchorus capsularis*, *Corchorus olitorius*)の樹皮, 茎, 葉, pigeon pea plant (*Cajanus cajan*)の樹皮, 茎, 葉; also traces found in the lichen *Parmotrema cetratum*
[性状]針状結晶 (EtOH)
[融点]Mp 72-74 ℃. Mp 88.5-89 ℃
[比旋光度]:[α]$_D^{20}$ +6 (c, 2 in Me_2CO). [α]$_D^{20}$ +4.6 (c, 6 in H_2O). [α]$_D^{20}$ -11.5 (c, 5 in EtOH)
[溶解性]温時エタノールに易溶
[販売元]Aldrich:37761-9; Fluka:89173; Sigma:T1907

----------文 献----------

IARC Monog., 1981, 26, 341; Suppl. 7, 363; Suppl. 6, 528, (レビュー, 毒性, Treosulfan)
Corradi da Silva, M. de L. et al., Phytochemistry, 1993, 34, 715, (分離)
Batsanov, A.S. et al., J.C.S. Perkin 1, 1995, 1281, (D-form isopropylidene, 合成法, IR, H-NMR, C13-NMR)
Kitajima, J. et al., Chem. Pharm. Bull., 1999, 47, 988-992, (分離, H-NMR, C13-NMR)

§ 3,5,14-Trihydroxycard-20(22)-enolide; (3 β,5 β,14 β)-form, 3-*O*-[β-D-Glucopyranosyl-(1 → 4)-2,6-dideoxy-β-D-*ribo*-hexopyranoside]
[化学名・別名]Corchorusoside C
[CAS No.]210637-17-5
[化合物分類]ステロイド
(Cardanolide steroids). (C23).
[構造式]



[分子式]$C_{35}H_{54}O_{13}$
[分子量]682.804
[基原]*Corchorus olitorius*
[性状]粉末
[比旋光度]:[α]$_D^{24}$ +20.6 (c, 0.5 in MeOH) (16.9)
UV: [neutral] λ $_{max}$ 217 (log ε 4.1) (MeOH)

----------文 献----------

Yoshikawa, M. et al., Heterocycles, 1998, 48, 869-873, (Corchorusoside C)
Nakamura, T. et al., Phytochemistry, 1998, 49, 2097-2101, (*Corchorus olitorius* saponin)
Goda, Y. et al., Tennen Yuki Kagobutsu Toronkai Koen Yoshishu, 1998, 40, 371-376; CA, 131, 85493j, (*Corchorus olitorius* constit)

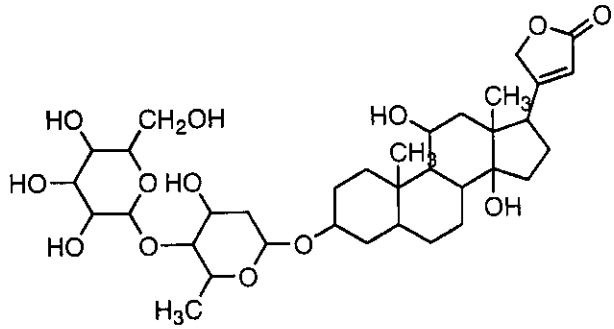
§ 3,11,14-Trihydroxycard-20(22)-enolide; (3 β,5 β,11 α,14 β)-form, 3-*O*-[β-D-Glucopyranosyl-(1 → 4)-2,6-dideoxy-β-D-*ribo*-hexopyranoside]

[化学名・別名]Corchorusoside B

[CAS No.]210637-16-4

[化合物分類]ステロイド(Cardanolide steroids). (C23).

[構造式]



[分子式]$C_{35}H_{54}O_{13}$

[分子量]682.804

[基原]*Corchorus olitorius*

[性状]粉末

[比旋光度]:[α]$_D^{26}$ +12.9 (c, 0.9 in MeOH)

UV: [neutral] λ $_{max}$ 217 (log ε 4.2) (MeOH)

----------文献----------

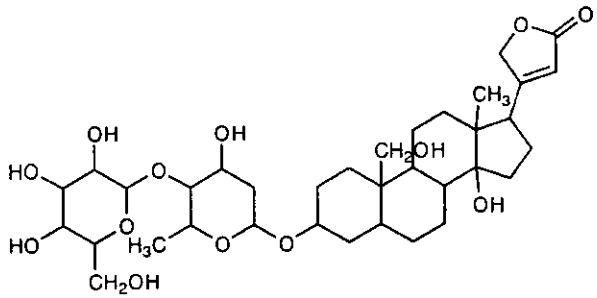
Yoshikawa, M. et al., Heterocycles, 1998, 48, 869-873, (Corchorusoside B)

§ 3,14,19-Trihydroxycard-20(22)-enolide; (3 β,5 β,14 β)-form, 3-*O*-[β-D-Glucopyranosyl-(1 → 4)-2,6-dideoxy-β-D-*xylo*-hexopyranoside]

[CAS No.]220710-05-4

[化合物分類]ステロイド(Cardanolide steroids). (C23).

[構造式]



[分子式]$C_{35}H_{54}O_{13}$

[分子量]682.804

[基原]*Corchorus olitorius*

[性状]無定型の粉末

[比旋光度]:[α]$_D^{22}$ -18.3 (c, 0.3 in MeOH)

----------文献----------

Nakamura, T. et al., Phytochemistry, 1998, 49, 2097-2101, (*Corchorus olitorius* saponin)

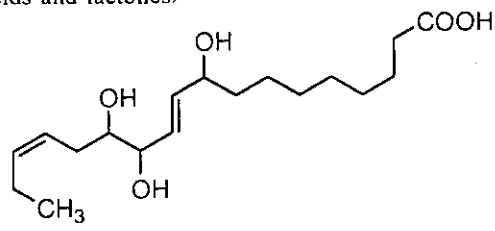
§ 9,12,13-Trihydroxy-10,15-octadecadienoic acid; (9*S*,10*E*,12*S*,13*S*,15*Z*)-form

[化学名・別名]Corchorifatty acid F

[CAS No.]95341-44-9

[化合物分類]脂肪族化合物(Unbranched alkenic carboxylic acids and lactones)

[構造式]



[分子式]$C_{18}H_{32}O_5$

[分子量]328.448

[基原]次の植物から分離: *Bryonia alba*, *Helianthus heterophyllus*, *Corchorus olitorius* and rice infected with blast disease

[用途]Confers activity against rice blast disease

[比旋光度]:[α]$_D^{24}$ -10.5 (c, 0.7 in MeOH)

[その他のデータ]Unnatural stereoisomers also synthesised

----------文献----------

Yoshikawa, M. et al., Chem. Pharm. Bull., 1998, 46, 1008-1014, (Corchorifatty acid F)

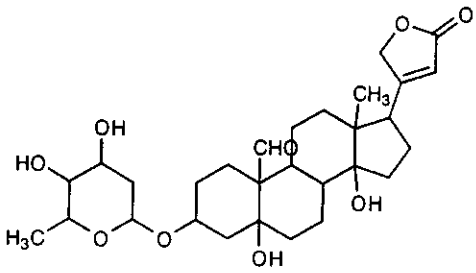
§ 3,5,14-Trihydroxy-19-oxocard-20(22)-enolide; (3 β,5 β,14 β)-form, 3-*O*-(2,6-Dideoxy-β-D-*xylo*-hexopyranoside)

[化学名・別名]Corchoroside A. Strophanthidin boivinoside

[CAS No.]508-76-9

[化合物分類]薬物: 強心剤(Cardiac stimulants), ステロイド(Cardanolide steroids). (C23).

[化合物分類]薬物: 強心剤(Cardiac stimulants), ステロイド(Cardanolide steroids). (C23).
[構造式]
[分子式]$C_{29}H_{42}O_9$
[分子量]534.645
[基原]*Corchorus capsularis*, *Corchorus olitorius*, *Erysimum* spp., *Castilla elastica*, *Hesperis matronalis*, その他
[用途]強心剤
[性状]結晶・二水和物(EtOH)
[融点]Mp 188-190℃ (無水物)
[比旋光度]:$[\alpha]_D^{20}$ +19 (MeOH)
[Log P 計算値]Log P -1.66 (未確認値)(計算値)
[化学物質毒性データ総覧(RTECS)登録番号]FH4970000

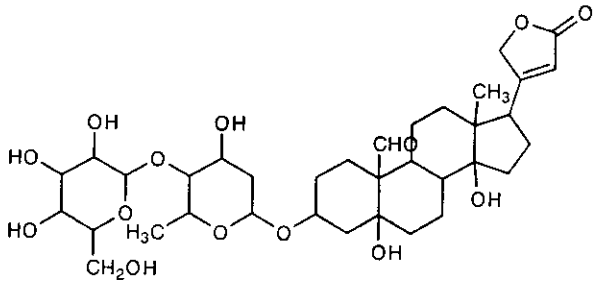


---文 献---

Manzetti, A. et al., Helv. Chim. Acta, 1964, 47, 2320-2330; 1969, 52, 482-500, (Strophalloside, 17 α-Strophanthidin)
Umarova, R.U. et al., Khim. Prir. Soedin., 1970, 6, 140; Chem. Nat. Compd. (Engl. Transl.), 1970, 6, 138, (Corchoroside A)
Gonzalez, A.G. et al., An. Quim., 1975, 71, 97-103, (Corchoroside A)
Timmermans, M. et al., Biochem. Syst. Ecol., 1992, 20, 343-349, (Strophanthidin allosides)
Nakamura, T. et al., Phytochemistry, 1998, 49, 2097-2101, (Corchoroside A, Helveticoside, H-NMR, C13-NMR)

***RTECS (化学物質毒性データ) ***
生体影響物質　　: 天然物.
健康障害に関するデータ
急性毒性に関するデータ
〈〈試験方法〉〉 LD50 試験(50%致死量試験).
曝露経路　　: 静脈内投与.
被験動物　　: ほ乳類-ネコ.
投与量・期間 : 77 ug/kg
毒性影響　　: 致死量以外に毒性影響に関する報告はない.
参照文献
Journal of Pharmacology and Experimental Therapeutics.(Williams & Wilkins Co., 428 E. Preston St., Baltimore, MD 21202) 111,365,1954

§ 3,5,14-Trihydroxy-19-oxocard-20(22)-enolide; (3β,5β,14β)-form, 3-*O*-[β-D-Glucopyranosyl-(1→4)-2,6-dideoxy-β-D-*xylo*-hexopyranoside]
[化学名・別名]Olitoriside. Olitorin
[CAS No.]13289-20-8
[化合物分類]ステロイド(Cardanolide steroids). (C23).
[構造式]
[分子式]$C_{35}H_{52}O_{14}$
[分子量]696.787
[基原]次の植物から分離: *Corchorus capsularis*, *Corchorus olitorius*
[融点]Mp 204-206℃
[比旋光度]:$[\alpha]_D^{22}$ -4.5

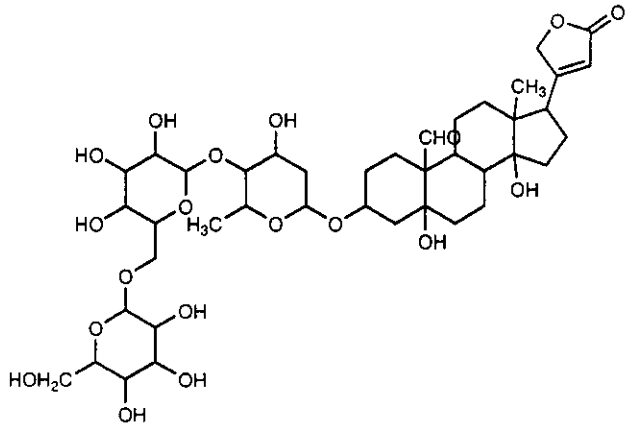


---文 献---

Karrer, W. et al., Konstitution und Vorkommen der Organischen Pflanzenstoffe, 2nd edn., Birkhäuser Verlag, Basel, 1972, nos. 2249; 2251-2254, (生育)
Mahato, S.B. et al., J.C.S. Perkin 1, 1989, 2065-2068, (Olitoriusin, 分離, H-NMR)

§ 3,5,14-Trihydroxy-19-oxocard-20(22)-enolide; (3β,5β,14β)-form, 3-*O*-[β-D-Glucopyranosyl-(1→6)-β-D-glucopyranosyl-(1→4)-2,6-dideoxy-β-D-*ribo*-hexopyranoside]
[化学名・別名]Olitoriusin
[CAS No.]125708-07-8
[化合物分類]ステロイド(Cardanolide steroids). (C23).

[構造式]

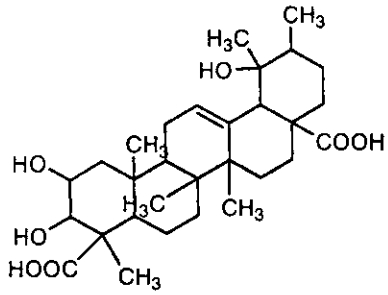


[分子式]$C_{41}H_{62}O_{19}$
[分子量]858.929
[基原]次の植物から分離: *Corchorus olitorius* の 種子
[性状]塊 (MeOH/Et_2O)
[融点]Mp 185-188 ℃
[比旋光度]:[α]$_D$ +21.2 (c, 0.45 in MeOH)

----------文献----------

Karrer, W. et al., Konstitution und Vorkommen der Organischen Pflanzenstoffe, 2nd edn., Birkhäuser Verlag, Basel, 1972, nos. 2249; 2251-2254, (生育)
Mahato, S.B. et al., J.C.S. Perkin 1, 1989, 2065-2068, (Olitoriusin, 分離, H-NMR)

§ 2,3,19-Trihydroxy-12-ursene-24,28-dioic acid; (2 α,3 β,19 α)-form
[化学名・別名]Corosin. Vismiaefolic acid. Trachelosperogenin A. Capsularone
[CAS No.]53527-49-4
[化合物分類]テルペノイド(Ursane triterpenoids)
[構造式]



[分子式]$C_{30}H_{46}O_7$
[分子量]518.689
[基原]*Corchorus capsularis*, *Corchorus olitorius*, *Stelmacrypton khasianum*, *Vochysia vismiaefolia*
[性状]結晶 (EtOH)
[融点]Mp 292-293 ℃で分解. Mp 300 ℃
[比旋光度]:[α]$_D^{26}$ +39 (c, 0.5 in MeOH)

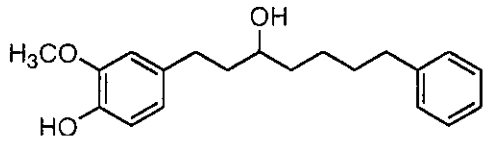
----------文献----------

Manzoor-i-Khuda, M. et al., Pak. J. Sci. Ind. Res., 1971, 14, 49, (分離)
Abe, F. et al., Chem. Pharm. Bull., 1987, 35, 1748, (Trachelosperogenin A1)
Ara acute u jo, F.W.L. et al., J. Nat. Prod., 1990, 53, 1436, (分離, H-NMR, C13-NMR)
Zhang, Q.-Y et al., J. Asian Nat. Prod. Res., 2000, 2, 81-86; CA, 133, 101980q, (分離)

**********ヤクチ (Yakuchi) **********

§§ショウガ科(*Alpinia oxyphylla* Miquel)の果実。

§ 1-(4-Hydroxy-3-methoxyphenyl)-7-phenyl-3-heptanol; (+)-form
[化合物分類]単環芳香族(Diarylalkyls)
[構造式]

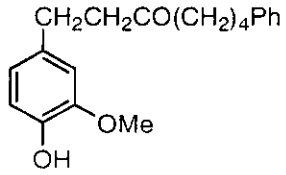


[分子式]$C_{20}H_{26}O_3$
[分子量]314.424
[基原]*Alpinia oxyphylla* の果実
[比旋光度]:[α]$_D^{20}$ +2.4 (c, 0.17 in EtOH)

----------文献----------

Luo, X. et al., Yaoxue Xuebao, 2000, 35, 204-207

§ 1-(4-Hydroxy-3-methoxyphenyl)-7-phenyl-3-heptanone
[化学名・別名]Yakuchinone A
[CAS No.]78954-23-1
[化合物分類]単環芳香族(Diarylalkyls)
[構造式]



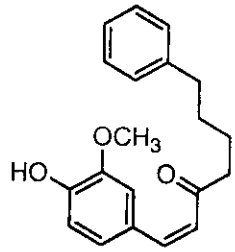
[分子式]$C_{20}H_{24}O_3$

[分子量]312.408
[基原]*Alpinia oxyphylla* の果実
[用途]Extremely pungent compd.
[性状]黄色がかったオイル

----------文 献----------

Itokawa, H. et al., Phytochemistry, 1981, 20, 769, (分離, spectra, 合成法)
Itokawa, H. et al., Phytochemistry, 1982, 21, 241, (誘導体)

§ 1-(4-Hydroxy-3-methoxyphenyl)-7-phenyl-3-heptanone; 1',2'-Didehydro
[化学名・別名]1-(4-Hydroxy-3-methoxyphenyl)-7-phenyl-1-hepten-3-one. Yakuchinone B
[CAS No.]81840-57-5
[化合物分類]単環芳香族(Diarylalkyls)
[構造式]
[分子式]$C_{20}H_{22}O_3$
[分子量]310.392
[基原]*Alpinia oxyphylla* の辛味成分
[性状]黄色の針状結晶(MeOH)
[融点]Mp 100.5 ℃



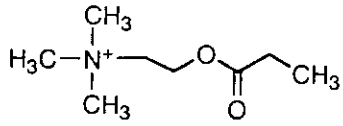
----------文 献----------

Itokawa, H. et al., Phytochemistry, 1981, 20, 769, (分離, spectra, 合成法)
Itokawa, H. et al., Phytochemistry, 1982, 21, 241, (誘導体)

*********ヤドリギ (Mistletoe) *********

§§ヤドリギ科セイヨウヤドリギ(*Viscum album* L.)

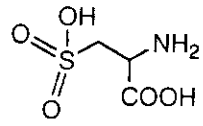
§ Choline; *O*-Propanoyl
[化学名・別名]Propionylcholine
[CAS No.]5072-54-8
[その他の CAS No.]2365-13-1, 2494-55-5
[化合物分類]アルカロイド化合物(Simple acyclic amine alkaloids; 1 × N)
[構造式]
[分子式]$C_8H_{18}NO_2^{(+)}$
[分子量]160.236
[基原]次の植物から分離: *Viscum album* (ヤドリギ科)



----------文 献----------

Parker, J.M. et al., J. Pharmacol. Exp. Ther., 1956, 118, 359, (薬理, Oxtriphylline)
Roth, F.E. et al., J. Pharmacol. Exp. Ther., 1957, 121, 487, (薬理, Oxtriphylline)
Whitaker, V.P., Biochem. J., 1959, 71, 32-34, (3-methyl-2-butenoyl)
Gmelin, R. et al., Phytochemistry, 1970, 9, 667, (分離, Isoferuloylcholine)
Moumihrle, H. et al., Arch. Pharm. (Weinheim, Ger.), 1973, 306, 489, (合成法, Isoferuloylcholine)
Zeisel, S.H. et al., Annu. Rev. Nutr., 1981, 1, 195, (レビュー)
Larsen, L.M. et al., Phytochemistry, 1983, 22, 219-222, (Feruloylcholine)
Negwer, M., Organic-Chemical Drugs and their Synonyms, 6th edn., Akademie-Verlag, 1987, 368, (synonyms)
Kirk-Othmer Encycl. Chem. Technol., 4th edn., Wiley, 1991, 6, 199, (レビュー)

§ Cysteic acid; (*R*)-form
[化学名・別名]L-form
[CAS No.]498-40-8
[化合物分類]アミノ酸とペプチド(Non-protein α-aminoacids)
[構造式]
[分子式]$C_3H_7NO_5S$
[分子量]169.158
[基原]Occurs free in *Viscum album* and in wool after exposure to light
[性状]針状結晶 (EtOH 溶液)



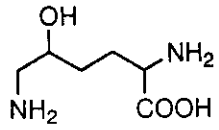
[その他のデータ]260℃で分解

----------文献----------

Heymann, H. et al., J.A.C.S., 1959, 81, 5125-5128, (S-amide)
Ross, D.L. et al., J.O.C., 1959, 24, 1372-1374, (S-amide)
Vester, F. et al., Hoppe Seyler's Z. Physiol. Chem., 1960, 322, 273, (分離)

§ 2,6-Diamino-5-hydroxyhexanoic acid; (2*S*,5*R*)-form

[化学名・別名]L-*erythro*-form
[CAS No.]1190-94-9
[化合物分類]アミノ酸とペプチド(Protein α-aminoacids)
[構造式]



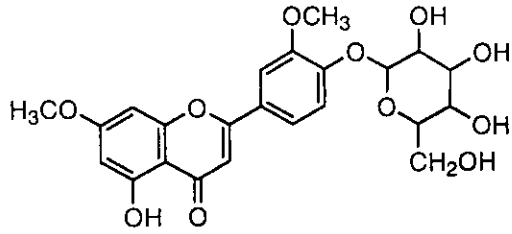
[分子式]$C_6H_{14}N_2O_3$
[分子量]162.188
[基原]One of the natural protein-bound amino acids. 植物組織の中で遊離の形で存在する，例えば，*Viscum album*, *Medicago sativa*
[比旋光度]:$[\alpha]_D^{25}$ +17.8 (c, 2 in 6 *M* HCl)

----------文献----------

Biochem. Prep., 1961, 8, 55-62; 62-69, (分離, 分割, purifn)
Wilding, M.D. et al., Phytochemistry, 1962, 1, 263-265, (分離)
Spiro, R.G. et al., J. Biol. Chem., 1967, 242, 4813-4823, (分離, 配糖体)
Napoli, R.M. et al., Chromatographia, 1989, 28, 497-501, (分離, 成書, 配糖体)

§ 4',5-Dihydroxy-3',7-dimethoxyflavone; 4'-*O*-β-D-Glucopyranoside

[化学名・別名]Flavoyadorinin B
[CAS No.]30271-21-7
[化合物分類]フラボノイド(Flavones; 4 × O-置換基)
[構造式]



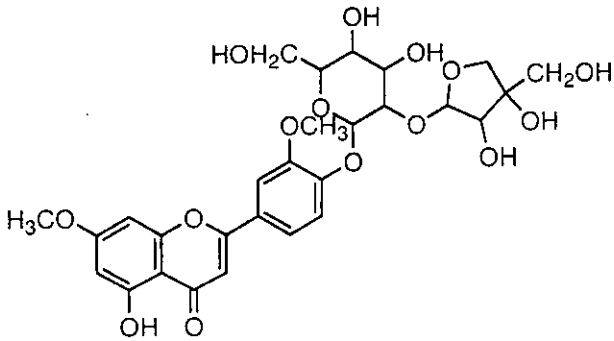
[分子式]$C_{23}H_{24}O_{11}$
[分子量]476.436
[基原]*Viscum album* の葉
[性状]青白い黄色の針状結晶 (EtOH)
[融点]Mp 203-206 ℃

----------文献----------

Ohta, N. et al., Agric. Biol. Chem., 1970, 34, 900, (Flavoyadorinin B, Homoflavoyadorinin B)

§ 4',5-Dihydroxy-3',7-dimethoxyflavone; 4'-*O*-[β-D-Apiofuranosyl-(1 → 2)-β-D-glucopyranoside]

[化学名・別名]Homoflavoyadorinin B
[CAS No.]30422-47-0
[化合物分類]フラボノイド(Flavones; 4 × O-置換基)
[構造式]



[分子式]$C_{28}H_{32}O_{15}$
[分子量]608.552
[基原]次の植物から分離: *Viscum album*
[性状]青白い黄色の針状結晶 (EtOH 溶液)
[融点]Mp 208-210 ℃
[その他のデータ]Sinters at 130 ℃

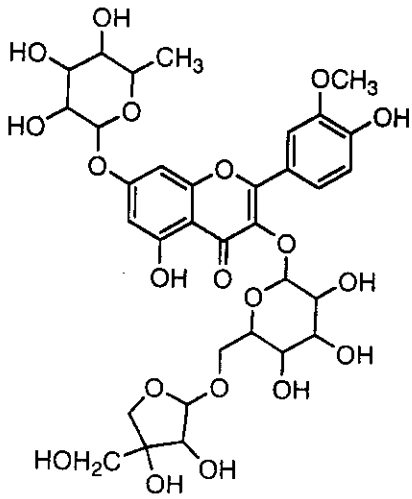
----------文 献----------

Ohta, N. et al., Agric. Biol. Chem., 1970, 34, 900, (Flavoyadorinin B, Homoflavoyadorinin B)

§ 3-Glucopyranosyloxy-4',5,7-trihydroxy-3'-methoxyflavone; 6''-*O*-β-D-Apiofuranosyl, 7-*O*-α-L-rhamnopyranoside

[CAS No.]115330-91-1
[化合物分類]フラボノイド(Flavonols; 5 × O-置換基)

[化合物分類]フラボノイド(Flavonols; 5 × O-置換基)
[構造式]

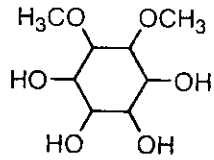


[分子式]$C_{39}H_{40}O_{20}$
[分子量]756.667
[基原]次の植物から分離: ヤドリギ, *Viscum album*
[性状]黄色がかった粉末
[融点]Mp 162-163 ℃

----------文 献----------

Krishnamurti, M. et al., Indian J. Chem., 1965, 3, 270, (3,7-diglucoside)

§ *muco*-Inositol; 1,2-Di-Me
[化学名・別名]1,2-Di-*O*-methyl-*muco*-inositol(CAS 名), Viscumitol
[CAS No.]145680-48-4
[化合物分類]炭水化物(Cyclitols)
[構造式]

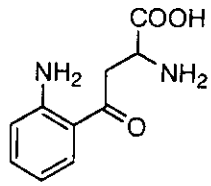


[分子式]$C_8H_{16}O_6$
[分子量]208.211
[基原]*Viscum album*
[性状]結晶 (1-butanol 溶液)
[融点]Mp 118-120 ℃

----------文 献----------

Foxall, C.D. et al., J.C.S., 1963, 5573, (分離)
Dangschat, G. et al., Carbohydr. Res., 1987, 164, 343, (合成法, 構造)
Hudlicky, J. et al., J.C.S. Perkin 1, 1994, 1553-1567, (合成法)

§ Kynurenine; (*R*)-form
[化学名・別名]D-form
[CAS No.]13441-51-5
[化合物分類]アミノ酸とペプチド(Non-protein α-aminoacids)
[構造式]

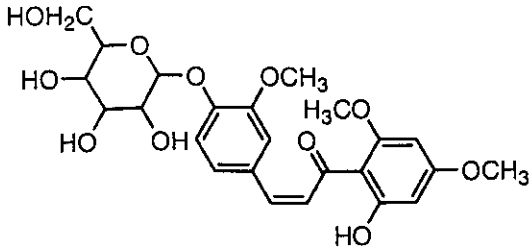


[分子式]$C_{10}H_{12}N_2O_3$
[分子量]208.216
[天然基原]*Viscum album* 中に遊離の形で存在
[融点]Mp 191 ℃
[比旋光度]:$[\alpha]_D^{25}$ +30
[販売元]Sigma:K2380

----------文 献----------

Vester, F. et al., Hoppe Seyler's Z. Physiol. Chem., 1960, 322, 273, (分離)
Greenstein, J.P. et al., Chemistry of the Amino Acids, Wiley, N.Y., 1961, 3, 2723, (分離, 合成法)
Benassi, C.A. et al., Gazz. Chim. Ital., 1967, 97, 3, (合成法)
Brown, K.S. et al., Tet. Lett., 1967, 1721, (Mass)

§ 2',3,4,4',6'-Pentahydroxychalcone; 2',3,4'-Tri-Me ether, 4-*O*-β-D-glucopyranoside
[化学名・別名]2',4-Dihydroxy-3,4',6'-trimethoxychalcone 4-glucoside
[CAS No.]112572-59-5
[化合物分類]フラボノイド(Chalcone flavonoids; 5 × O-置換基)
[構造式]



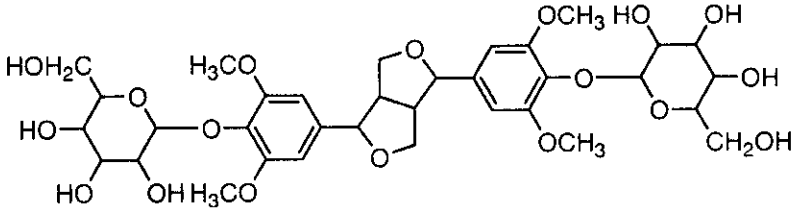
[天然基原]次の植物から分離: *Viscum album*
[性状]青白い黄色の粉末
[融点]Mp 223-226 ℃

---文献---

Rimpler, H. et al., Arch. Pharm. (Weinheim, Ger.), 1965, 298, 838, (配糖体)
Wiermann, R., Planta, 1970, 95, 133, (分離)
Fraser, A.W. et al., Phytochemistry, 1974, 13, 1561, (分離)
Chibber, S.S. et al., Curr. Sci., 1982, 51, 933, (分離, Tephrone)
Imperato, F., Experientia, 1982, 38, 67, (分離, 誘導体)
Fukunaga, T. et al., Chem. Pharm. Bull., 1987, 35, 3292, (配糖体)
Greenaway, W. et al., Phytochemistry, 1991, 30, 3005, (2',4,4',6-Tetrahydroxy-3-methoxychalcone)

§ Syringaresinol; (-)-form, Di-*O*-β-D-glucopyranoside

[化学名・別名]Acanthoside D. Eleutheroside E
[CAS No.]96038-87-8
[化合物分類]リグナン化合物(Simple furofuranoid lignans)
[構造式]



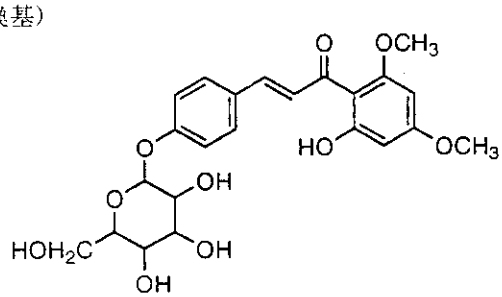
[分子式]$C_{34}H_{46}O_{18}$
[分子量]742.727
[天然基原]次の植物から分離: ian ginseng (*Eleutherococcus Acanthopanax*) *senticosus*), *trum japonicum*, *Liriodendron fera*, *Albizzia julibrissin*, *Viscum album*
Siber (*Ligus tulipi*
[性状]針状結晶
[融点]Mp 269-270 ℃
[比旋光度]:$[\alpha]_D^{22}$ -18.5 (c, 0.54 in 50% EtOH 溶液)

---文献---

Nimz, H. et al., Chem. Ber., 1965, 98, 538, (分離, (±)-Syringaresinol)
Seikel, M.F. et al., Phytochemistry, 1971, 10, 2249, (分離)
Sudo, K. et al., CA, 1973, 79, 32818v, (分離)
Bryan, R.F. et al., J.C.S. Perkin 2, 1976, 341, (結晶構造, 成書)
Fujimoto, H. et al., CA, 1977, 87, 197244h, (分離)
Vermes, B. et al., Phytochemistry, 1991, 30, 3087, (合成法, Acanthosides, 配糖体)
Chakravarty, A.K. et al., Indian J. Chem., Sect. B, 1994, 33, 405, (分離, (-)-form)

§ 2',4,4',6'-Tetrahydroxychalcone; 2',4'-Di-Me ether, 4-*O*-β-D-glucopyranoside

[CAS No.]68984-71-4
[化合物分類]フラボノイド(Chalcone flavonoids; 4 × O-置換基)
[構造式]



[分子式]$C_{23}H_{26}O_{10}$
[分子量]462.542
[天然基原]次の植物から分離: *Viscum album*
[融点]Mp 156-158 ℃

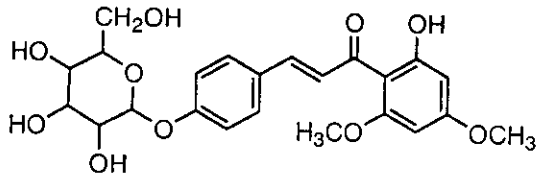
---文献---

Guise, G.B. et al., Aust. J. Chem., 1962, 15, 314, (分離, 誘導体)
Maruyama, M. et al., Phytochemistry, 1974, 13, 286, (Gnaphalin)
Wright, W.G., J.C.S. Perkin 1, 1976, 1819, (Helichrysin)

De Vlaming, P. et al., Phytochemistry, 1976, 15, 348, (分離)
Vinokurov, I.I. et al., Khim. Prir. Soedin., 1979, 15, 355, (coumaroylglucoside)
Bohlmann, L. et al., Phytochemistry, 1979, 18, 889; 1338, (分離)
Wollenweber, E. et al., Z. Naturforsch., C, 1979, 34, 1289, (分離)
Hunt, G.M. et al., Phytochemistry, 1980, 19, 1415, (分離)

§ 2',4,4',6'-Tetrahydroxychalcone; 4',6'-Di-Me ether, 4-*O*-β-D-glucopyranoside

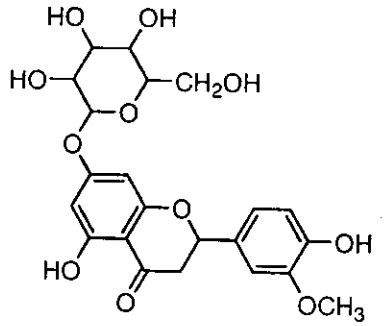
[化学名・別名]2',4-Dihydroxy-4',6-dimethoxychalcone 4-glucoside
[化合物分類]フラボノイド(Chalcone flavonoids; 4 × O-置換基)
[構造式]
[分子式]$C_{23}H_{26}O_{10}$
[分子量]462.542
[天然基原]次の植物から分離: *Viscum album*
[性状]黄色がかった針状結晶
[融点]Mp 166-168 ℃



文 献
Guise, G.B. et al., Aust. J. Chem., 1962, 15, 314, (分離, 誘導体)
Maruyama, M. et al., Phytochemistry, 1974, 13, 286, (Gnaphalin)
Lam, J. et al., Phytochemistry, 1975, 14, 1621, (分離, 誘導体)
De Vlaming, P. et al., Phytochemistry, 1976, 15, 348, (分離)
Bohlmann, L. et al., Phytochemistry, 1979, 18, 889; 1338, (分離)
Wollenweber, E. et al., Z. Naturforsch., C, 1979, 34, 1289, (分離)
Bilia, A.R. et al., Tetrahedron, 1994, 50, 5181, (2'-Me ether 4-glucoside)

§ 3',4',5,7-Tetrahydroxyflavanone; (*S*)-form, 3'-Me ether, 7-*O*-β-D-glucopyranoside

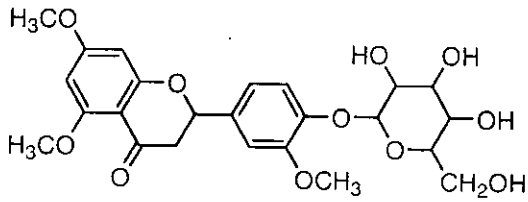
[化学名・別名]Homoeriodictyol 7-glucoside. Viscumside A
[CAS No.]14982-11-7
[化合物分類]フラボノイド(Flavanones; 4 × O-置換基)
[構造式]
[分子式]$C_{22}H_{24}O_{11}$
[分子量]464.425
[天然基原]次の植物から分離: *Viscum album*, *Viscum coloratum*, *Viscum multinerve*
[融点]Mp 175-176 ℃ (141-144 ℃)
[比旋光度]:$[\alpha]_D^{20}$ -32.9



文 献
Kong, D. et al., Yiyao Gongye, 1987, 13, 123; CA, 107, 20760, (Viscumneoside I, Viscumside A)
Fukunaga, T. et al., Chem. Pharm. Bull., 1988, 36, 1185, (Viscumside A)
Kong, D. et al., Yaoxue Xuebao, 1988, 23, 593; CA, 110, 92058, (Viscumneosides)

§ 3',4',5,7-Tetrahydroxyflavanone; (*S*)-form, 3',5,7-Tri-Me ether, 4'-*O*-β-D-glucopyranoside

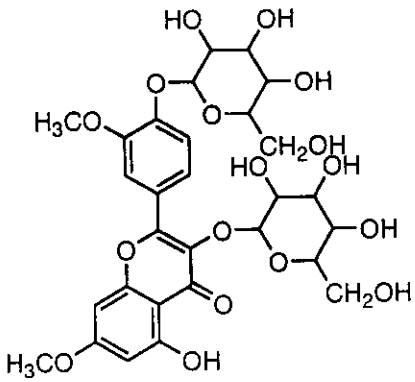
[CAS No.]112503-96-5
[化合物分類]フラボノイド(Flavanones; 4 × O-置換基)
[構造式]
[分子式]$C_{24}H_{28}O_{11}$
[分子量]492.479
[天然基原]*Viscum album*
[性状]粉末
[融点]Mp 146-149 ℃
[比旋光度]:$[\alpha]_D^{25}$ -43 (c, 0.3 in MeOH/Me_2CO)



文 献
Garo, E. et al., Phytochemistry, 1996, 43, 1265, (分離, H-NMR, C13-NMR)

§ 3,4',5-Trihydroxy-3',7-dimethoxyflavone; 3,4'-Di-*O*-β-D-glucopyranoside

[CAS No.]124019-38-1
[化合物分類]フラボノイド(Flavonols; 5 × O-置換基)
[構造式]

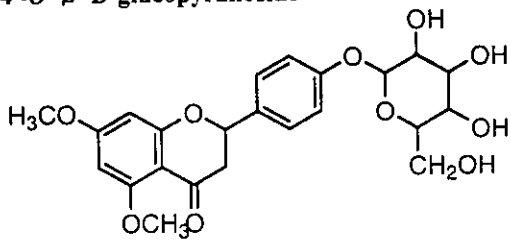


[分子式] $C_{29}H_{34}O_{17}$
[分子量] 654.577
[天然基原] *Viscum album* var. *coloratum*
[性状] 黄色がかった粉末
[融点] Mp 245-247 ℃

----------文献----------

Wollenweber, E. et al., Z. Naturforsch., B, 1972, 27, 567, (分離)
The Flavonoids: Advances in Research since 1980, (Ed. Harborne, J.B.), Chapman and Hall, London, 1988

§ 4',5,7-Trihydroxyflavanone; (*R*)-form, 5,7-Di-Me ether, 4'-*O*-β-D-glucopyranoside



[CAS No.] 112572-60-8
[化合物分類] フラボノイド (Flavanones; 3 × O-置換基)
[構造式]
[分子式] $C_{23}H_{26}O_{10}$
[分子量] 462.542
[天然基原] *Viscum album*
[性状] 針状結晶
[融点] Mp 184-187 ℃
[比旋光度]: $[\alpha]_D^{25}$ -25 (c, 0.32 in MeOH/Me_2CO)

----------文献----------

Aldrich Library of FT-IR Spectra, 1st edn., 1985, 2, 94D, (IR)
Albach, R.F. et al., Phytochemistry, 1969, 8, 127, (分離)
Korku acute c, A., Wiad. Chem., 1969, 23, 345; CA, 71, 56224j, (レビュー)
Aurnhammer, G. et al., Chem. Ber., 1970, 103, 1578; 1971, 104, 473; 1972, 105, 3511, (分離, 合成法)
Gaffield, W., Tetrahedron, 1970, 26, 4093, (ORD, 絶対構造)
Asakawa, Y. et al., Bull. Chem. Soc. Jpn., 1971, 44, 2761, (分離)
Kowalewski, Z. et al., Planta Med., 1971, 19, 311, (分離)
Nevskaya, A.N. et al., Zh. Anal. Khim., 1972, 27, 1699, (用途)
Donnelly, D.M.X. et al., J.C.S. Perkin 1, 1973, 1737, (分離)
Bohlmann, F. et al., Phytochemistry, 1979, 18, 1011; 1984, 23, 1338, (4'-Hydroxy-5,7-dimethoxyflavanone, 4',5-Dihydroxy-7-prenyloxyflavanone)
Jaipetch, T. et al., Phytochemistry, 1983, 22, 625, (分離)
Fukunaga, T. et al., Chem. Pharm. Bull., 1987, 35, 3292, (5,7-di-Me ether 4'-glucoside)
Wilcox, L.J. et al., Cardiovasc. Drug Rev., 1999, 17, 160-178, (Naringenin, レビュー)

§ Viscotoxin

[CAS No.] 76822-96-3
[関連 CAS No.] 11063-16-4, 11088-20-3, 12583-96-9, 37239-90-0, 54651-39-7
[化合物分類] アミノ酸とペプチド (Linear polypeptides)
[構造式] 不明
[一般的性質] ペプチド混合物. Viscotoxins A_2, A_3 and B have been characterised. They comprise 46 amino acid residues with 3 intramolecular disulfide bridges
[天然基原] 次の植物から分離: *Viscum album* (mistletoe)
[化学物質毒性データ総覧 (RTECS) 登録番号] ZA6125000

----------文献----------

Samuelsson, G. et al., Acta Chem. Scand., 1971, 25, 2048; 1972, 26, 585, (構造決定)
Kanopa, J. et al., Hoppe Seyler's Z. Physiol. Chem., 1980, 361, 1525, (分離)
Lewis, R.J., Sax's Dangerous Properties of Industrial Materials, 8th edn., Van Nostrand Reinhold, 1992, VRU000

***RTECS (化学物質毒性データ) ***
健康障害に関するデータ

健康障害に関するデータ
急性毒性に関するデータ

〈〈試験方法〉〉 LD50 試験(50%致死量試験).
曝露経路　：静脈内投与.
被験動物　：げっ歯類-ラット.
投与量・期間：260 ug/kg
毒性影響　：〔行動〕興奮.
〔血管〕その他の変化.
〔肺,胸郭,または呼吸〕呼吸困難.

参照文献

Naunyn-Schmiedeberg's Archiv fuer Experimentelle Pathologie und Pharmakologie 209,165,1950

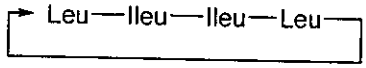
〈〈試験方法〉〉 LD50 試験(50%致死量試験).
曝露経路　：腹腔内投与.
被験動物　：げっ歯類-マウス.
投与量・期間：500 ug/kg
毒性影響　：〔心臓〕脈拍
〔血管〕自律性の切断を伴わない血圧の低下.

参照文献

Systematic Zoology.(Soc. of Systematic Zoology, POB 368, Lawrence, KS 66044) 22,566,1973
Ger.) V.110-253, 1925-66. For publisher information, see NSAPCC. [Vol.,頁,年(19-)]209,165,1950

§ Viscumamide

[化学名・別名]Cyclic(L-isoleucyl-L-leucyl-L-isoleucyl-L-leucyl-L-leucyl) (CAS 名)
[CAS No.]38184-76-8
[化合物分類]アミノ酸とペプチド(Cyclic oligo- and polypeptides)
[構造式]



[分子式]$C_{30}H_{55}N_5O_5$
[分子量]565.795
[天然基原]*Viscum album*
[性状]針状結晶 (EtOH)
[融点]Mp 349.5-351 ℃
[比旋光度]:$[\alpha]_D^{25}$ -49.1 (c, 0.199 in EtOH)

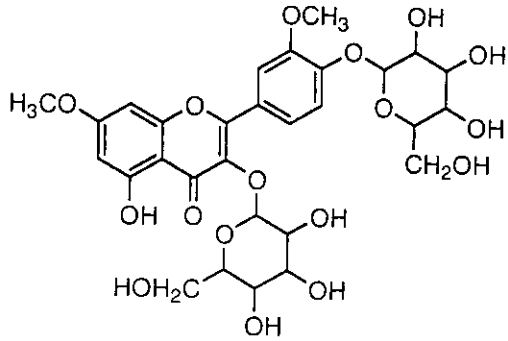
文 献

Okumura, Y. et al., Bull. Chem. Soc. Jpn., 1973, 46, 2190, (分離, 構造)

§§ヤドリギ科ヤドリギ(*Viscum album* L. var. *coloratum* Ohwi)の茎葉。

§ 3,4',5-Trihydroxy-3',7-dimethoxyflavone; 3,4'-Di-*O*-β-D-glucopyranoside

[CAS No.]124019-38-1
[化合物分類]フラボノイド(Flavonols; 5 × O-置換基)
[構造式]



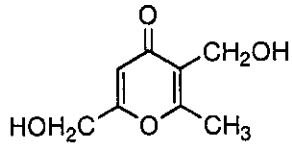
[分子式]$C_{29}H_{34}O_{17}$
[分子量]654.577
[天然基原]*Viscum album* var. *coloratum*
[性状]黄色がかった粉末
[融点]Mp 245-247 ℃

文 献

Wollenweber, E. et al., Z. Naturforsch., B, 1972, 27, 567, (分離)
Saharia, H.S. et al., Curr. Sci., 1976, 45, 294, (Hyperin 3',7-dimethyl ether)
The Flavonoids: Advances in Research since 1980, (Ed. Harborne, J.B.), Chapman and Hall, London, 1988
Fukunaga, T. et al., Chem. Pharm. Bull., 1989, 37, 1300, (3,4'-diglucoside)

§§ ハリタケ科ヤマブシタケ(*Hericium erinaceum* (Fr.) Persoon)の子実体。

§ 3,6-Bis(hydroxymethyl)-2-methyl-4*H*-pyran-4-one

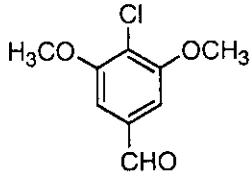


[化学名・別名]Herierin III
[CAS No.]131123-56-3
[化合物分類]含酸素複素環式化合物(4-Pyrones)
[構造式]
[分子式]$C_8H_{10}O_4$
[分子量]170.165
[天然基原]*Hericium erinaceum*

----------文献----------

Qian, F. et al., CA, 1991, 114, 20976g, (分離, H-NMR)

§ 4-Chloro-3,5-dihydroxybenzaldehyde; Di-Me ether

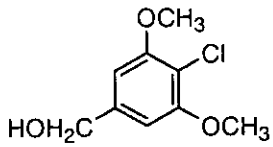


[化学名・別名]4-Chloro-3,5-dimethoxybenzaldehyde
[CAS No.]56518-48-0
[化合物分類]単環芳香族(Simple benzaldehydes)
[構造式]
[分子式]$C_9H_9ClO_3$
[分子量]200.621
[天然基原]次の植物から分離: *Hericium erinaceum* の菌糸体
[用途]抗菌活性を示す
[性状]結晶
[融点]Mp 165-167 ℃ (118-120 ℃)

----------文献----------

Kompis, I. et al., Helv. Chim. Acta, 1977, 60, 3025, (合成法)
Okamoto, K. et al., Phytochemistry, 1993, 34, 1445, (分離)

§ 4-Chloro-3,5-dihydroxybenzyl alcohol; 1,3-Di-Me ether

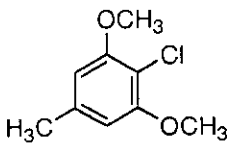


[化学名・別名]4-Chloro-3,5-dimethoxybenzyl alcohol
[CAS No.]152570-76-8
[化合物分類]単環芳香族(Simple benzyl alcohols)
[構造式]
[分子式]$C_9H_{11}ClO_3$
[分子量]202.637
[天然基原]次の植物から分離: *Hericium erinaceum* の菌糸体
[用途]抗菌活性を示す
[性状]結晶
[融点]Mp 83-85 ℃

----------文献----------

Okamoto, K. et al., Phytochemistry, 1993, 34, 1445, (分離)

§ 2-Chloro-5-methyl-1,3-benzenediol; Di-Me ether

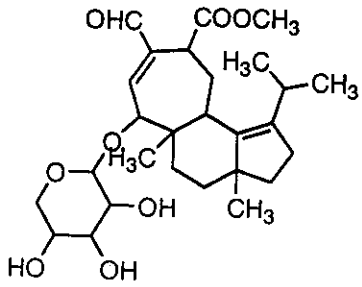


[化学名・別名]2-Chloro-1,3-dimethoxy-5-methylbenzene, 4-Chloro-3,5-dimethoxytoluene
[CAS No.]27971-69-3
[化合物分類]単環芳香族(Simple benzene derivatives)
[構造式]
[分子式]$C_9H_{11}ClO_2$
[分子量]186.637
[天然基原]次の植物から分離: *Hericium erinaceum* の菌糸体
[性状]結晶 (EtOH)
[融点]Mp 74-75 ℃

----------文献----------

Hill, R.A. et al., J.C.S. Perkin 1, 1987, 2209-2215, (合成法, di-Me ether)
Okamoto, K. et al., Phytochemistry, 1993, 34, 1445, (di-Me ether)
Monde, K. et al., J. Nat. Prod., 1998, 61, 913-921, (分離, UV, IR, H-NMR, C13-NMR, Mass)

§ 3,12-Cyathadiene-11,14,15-triol; (11 α,14 β)-form, 15-Aldehyde, 11-Ac, 14-*O*-β-D-xylopyranoside
[化学名・別名]Erinacine P
[CAS No.]291532-17-7
[化合物分類]テルペノイド(Cyathane diterpenoids)
[構造式]

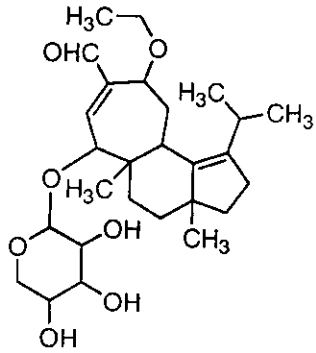


[分子式]$C_{27}H_{40}O_8$
[分子量]492.608
[天然基原]次の植物の代謝物: *Hericium erinaceum*
[性状]無定型の塊.
[比旋光度]:$[\alpha]_D^{25}$ -52.4 (c, 0.23 in MeOH)
UV: [neutral] λ_{max} 206 (ε 7500); 228 (ε 6900) (MeOH)

----------文 献----------

Kenmoku, H. et al., Tet. Lett., 2000, 41, 4389-4393, (Erinacine P)

§ 3,12-Cyathadiene-11,14,15-triol; (11 β,14 β)-form, 15-Aldehyde, 11-Et ether, 14-*O*-β-D-xylopyranoside
[化学名・別名]Erinacine D
[CAS No.]157397-40-5
[化合物分類]テルペノイド(Cyathane diterpenoids)
[構造式]

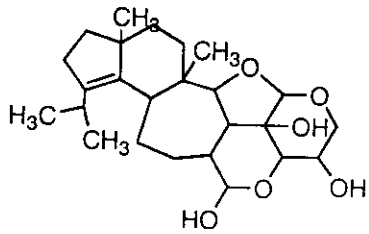


[分子式]$C_{27}H_{42}O_7$
[分子量]478.625
[天然基原]次の植物の代謝物: *Hericium erinaceum*
[性状]結晶
[融点]Mp 121-123 ℃

----------文 献----------

Kawagishi, H. et al., Heterocycl. Commun., 1996, 2, 51, (Erinacine D)

§ *O*-Demethylstriatin C; 10,29-DIdeoxy, 11,12 α-dihydro
[CAS No.]178120-48-4
[化合物分類]テルペノイド(Miscellaneous sesterterpenoids), テルペノイド(Cyathane diterpenoids), 炭水化物(Miscellaneous carbohydrate antibiotics)
[構造式]

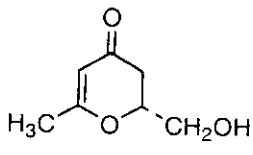


[分子式]$C_{25}H_{38}O_6$
[分子量]434.572
[天然基原]*Hericium erinaceum*
[溶解性]BERDY SOL: メタノール, アセトン, クロロホルムに可溶

----------文 献----------

Anke, T. et al., J. Antibiot., 1977, 30, 221, (分離, Mass, IR, NMR)
Hecht, H.-J. et al., Chem. Comm., 1978, 665, (結晶構造, H-NMR, C13-NMR, IR)
Japan. Pat., 1996, 96 73 486; CA, 125, 56399, (誘導体)

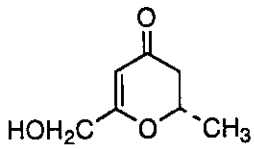
§ 2,3-Dihydro-2-(hydroxymethyl)-6-methyl-4*H*-pyran-4-one (CAS 名)
[化学名・別名]Erinapyrone B
[CAS No.]146064-67-7
[化合物分類]含酸素複素環式化合物(4-Pyrones)
[構造式]



[分子式]$C_7H_{10}O_3$
[分子量]142.154
[天然基原]次の植物から分離: *Hericium erinaceum*
[用途]細胞毒剤

Kawagishi, H. et al., Chem. Lett., 1992, 2475, (分離, CD, H-NMR, C13-NMR)
Noda, Y. et al., Heterocycles, 1996, 43, 271, (合成法)

§ 2,3-Dihydro-6-(hydroxymethyl)-2-methyl-4*H*-pyran-4-one (CAS 名)

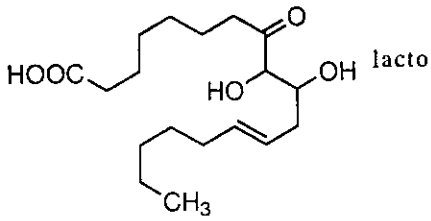


[化学名・別名]Erinapyrone A
[CAS No.]146064-66-6
[化合物分類]含酸素複素環式化合物(4-Pyrones)
[構造式]
[分子式]$C_7H_{10}O_3$
[分子量]142.154
[天然基原]次の植物から分離: *Hericium erinaceum*
[用途]細胞毒剤
[性状]オイル

----------文献----------

Kawagishi, H. et al., Chem. Lett., 1992, 2475, (分離, CD, H-NMR, C13-NMR)
Noda, Y. et al., Heterocycles, 1996, 43, 271, (合成法)

§ 9,10-Dihydroxy-8-oxo-12-octadecenoic acid; (9*R*,10*S*,12*Z*)-form



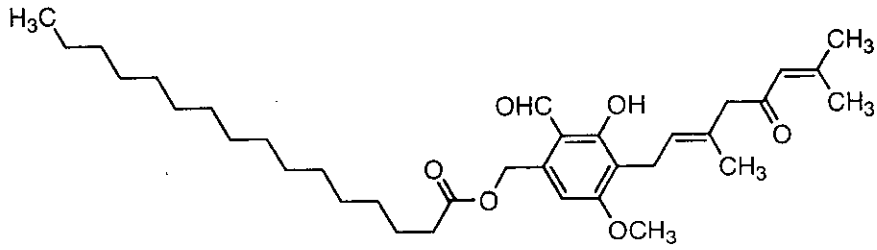
[CAS No.]142036-13-3
[化合物分類]脂肪族化合物(Unbranched alkenic carboxylic acids and lactones)
[構造式]
[分子式]$C_{18}H_{32}O_5$
[分子量]328.448
[天然基原]キノコ *Hericium erinaceum*
[用途]細胞毒, 植物毒
[性状]微細結晶 (EtOAc/hexane)
[融点]Mp 56-57 ℃
[比旋光度]:$[\alpha]_D^{22}$ -48.9 (c, 1.49 in $CHCl_3$)
[溶解性]BERDY SOL: EtOAc, クロロホルム, アセトンに可溶; ヘキサン, メタノールに易溶; 水に難溶

----------文献----------

Kawagishi, H. et al., Agric. Biol. Chem., 1990, 54, 1329, (分離, H-NMR, Mass)
Kuwahara, S. et al., Biosci., Biotechnol., Biochem., 1992, 56, 1417, (合成法, 絶対構造)
Yokota, H. et al., Biosci., Biotechnol., Biochem., 1995, 59, 1562, (活性)

§ 3-(3,7-Dimethyl-5-oxo-2,6-octadienyl)-2-hydroxy-6-(hydroxymethyl)-4-methoxybenzaldehyde; 1'-*O*-Hexadecanoyl

[化学名・別名]Hericenone C
[CAS No.]137592-03-1
[化合物分類]テルペノイド(Meroterpenoids)
[構造式]



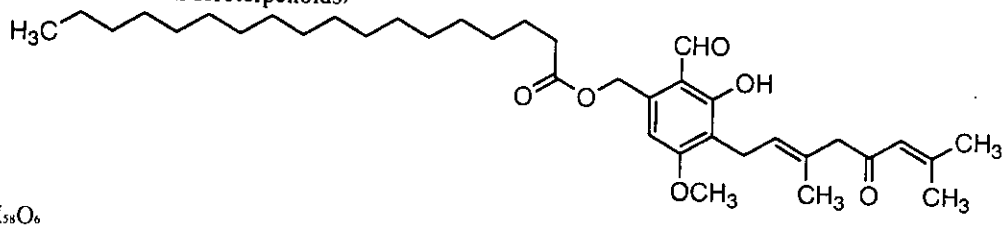
[分子式]$C_{35}H_{54}O_6$
[分子量]570.808
[天然基原]次の植物から分離: キノコ *Hericium erinaceum*
[用途]Stimulates synth. of nerve growth factor (NGF)
[性状]結晶
[融点]Mp 38-40 ℃
UV: [base] λ_{max} (溶媒は報告されていない) (Derep) [neutral] λ_{max} 225 (ε 22800); 231 (sh) (ε 21500); 236 (ε 21900); 267 (sh) (ε 5100); 294 (ε 14500) (MeOH) (Derep)

----------文献----------

Kawagishi, H. et al., Tet. Lett., 1991, 32, 4561

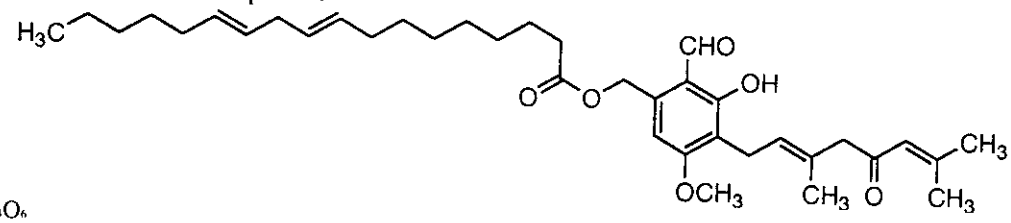
文 献
Kawagishi, H. et al., Tet. Lett., 1991, 32, 4561
Arnone, A. et al., J. Nat. Prod., 1994, 57, 602, (Hericenes)

§ 3-(3,7-Dimethyl-5-oxo-2,6-octadienyl) -2-hydroxy-6-(hydroxymethyl) -4-methoxybenzaldehyde; 1'-*O*-Octadecanoyl
[化学名・別名]Hericenone D
[CAS No.]137592-04-2
[化合物分類]テルペノイド(Meroterpenoids)
[構造式]



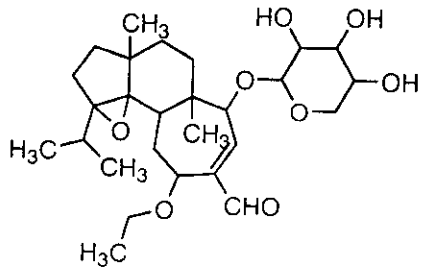
[分子式]$C_{37}H_{58}O_6$
[分子量]598.862
[天然基原]*Hericium erinaceum*
[用途]Stimulates synth. of NGF
[性状]結晶
[融点]Mp 41-43 ℃
UV: [neutral] λ_{max} 225 (ε 22800); 231 (sh) (ε 21500); 236 (ε 21900); 267 (sh) (ε 5100); 294 (ε 14500) (MeOH) (Derep) [base] λ_{max} (溶媒は報告されていない) (Derep)
文 献
Kawagishi, H. et al., Tet. Lett., 1991, 32, 4561
Arnone, A. et al., J. Nat. Prod., 1994, 57, 602, (Hericenes)

§ 3-(3,7-Dimethyl-5-oxo-2,6-octadienyl)-2-hydroxy-6-(hydroxymethyl)-4-methoxybenzaldehyde; 1'-*O*-(9*Z*,12*Z*-Octadecadienoyl)
[化学名・別名]Hericenone E
[CAS No.]137592-05-3
[化合物分類]テルペノイド(Meroterpenoids)
[構造式]



[分子式]$C_{37}H_{54}O_6$
[分子量]594.83
[天然基原]*Hericium erinaceum*
[用途]Stimulates synth. of NGF
[性状]オイル
UV: [base] λ_{max} (溶媒は報告されていない) (Derep) [neutral] λ_{max} 225 (ε 22800); 231 (sh) (ε 21500); 236 (ε 21900); 267 (sh) (ε 5100); 294 (ε 14500) (MeOH) (Derep)
文 献
Kawagishi, H. et al., Tet. Lett., 1991, 32, 4561
Arnone, A. et al., J. Nat. Prod., 1994, 57, 602, (Hericenes)

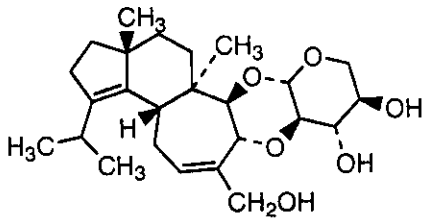
§ 3,4-Epoxy-11,14-dihydroxy-12-cyathen-15-al; (3 β,4 β,11 β,14 β)-form, 11-Et ether, 14-*O*-β-D-xylopyranoside



[CAS No.]178120-49-5
[化合物分類]テルペノイド(Cyathane diterpenoids)
[構造式]
[分子式]$C_{27}H_{42}O_8$
[分子量]494.624
[天然基原]*Hericium erinaceum*

Japan. Pat., 1996, 96 73 486; CA, 125, 56399

§ Erinacine C

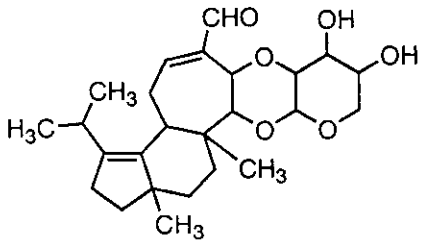


[CAS No.] 156101-09-6
[化合物分類] テルペノイド (Cyathane diterpenoids)
[構造式]
[分子式] $C_{25}H_{38}O_6$
[分子量] 434.572
[天然基原] 次の植物の代謝物: *Hericium erinaceum*
[性状] 結晶
[融点] Mp 115-118 ℃
[溶解性] BERDY SOL: メタノール, EtOAc, アセトン, クロロホルムに可溶; エタノールに易溶; 水に難溶
UV: [neutral] λ_{max} 203 (ε 8100) (MeOH) (Berdy)

----------文献----------

Kawagishi, H. et al., Tet. Lett., 1994, 35, 1569, (分離, H-NMR, C13-NMR)
Kenmoku, H. et al., Tet. Lett., 2000, 41, 4389-4393, (合成法)

§ Erinacine C; 15-Aldehyde

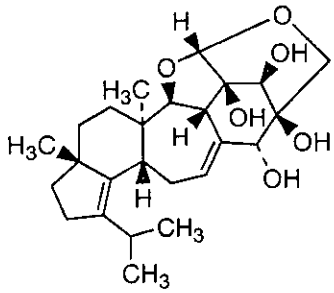


[化学名・別名] Erinacine B
[CAS No.] 156101-08-5
[化合物分類] テルペノイド (Cyathane diterpenoids)
[構造式]
[分子式] $C_{25}H_{36}O_6$
[分子量] 432.556
[天然基原] 次の植物の代謝物: *Hericium erinaceum*
[性状] 結晶
[融点] Mp 125-127 ℃
[溶解性] BERDY SOL: メタノール, アセトン, EtOAc, クロロホルムに可溶; エタノールに易溶; 水に難溶
UV: [neutral] λ_{max} 200 (ε 20800); 230 (ε 8400) (MeOH) (Berdy)

----------文献----------

Kawagishi, H. et al., Tet. Lett., 1994, 35, 1569, (分離, H-NMR, C13-NMR)
Kenmoku, H. et al., Tet. Lett., 2000, 41, 4389-4393, (合成法)

§ Erinacine E



[CAS No.] 178120-47-3
[化合物分類] テルペノイド (Cyathane diterpenoids)
[構造式]
[分子式] $C_{25}H_{36}O_6$
[分子量] 432.556
[天然基原] 次の植物の代謝物: *Hericium erinaceum*, *Hericium ramosum*
[用途] Kappa opioid receptor agonist
[性状] 結晶
[融点] Mp 161-163 ℃
[比旋光度]: $[\alpha]_D^{25}$ -144 (c, 0.5 in MeOH)
UV: [neutral] λ_{max} 207 (ε 7100) (MeOH)

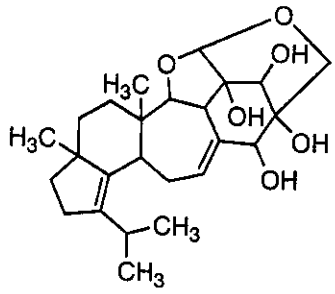
----------文献----------

Kawagishi, H. et al., Tet. Lett., 1996, 37, 7399-7402, (分離, H-NMR, C13-NMR, 結晶構造)
Saito, T. et al., J. Antibiot., 1998, 51, 983-990, (分離, 誘導体)

§ Erinacine E; Diastereoisomer

[化学名・別名] Erinacine F
[CAS No.] 178232-25-2
[化合物分類] テルペノイド (Cyathane diterpenoids)

[構造式]

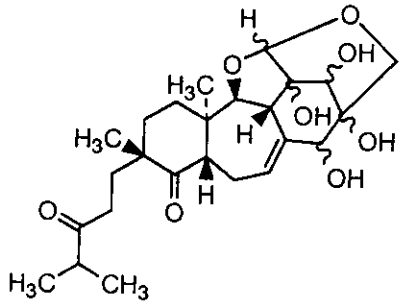


[分子式] $C_{25}H_{36}O_6$
[分子量] 432.556
[天然基原] 次の植物の代謝物: *Hericium erinaceum*
[比旋光度]: $[\alpha]_D^{25}$ -31 (c, 0.2 in MeOH)
[溶解性] BERDY SOL: メタノール, クロロホルム, アセトンに可溶
UV: [neutral] λ_{max} 203 (ε 8000) (MeOH) [neutral] λ_{max} 203 (ε 8000) (MeOH) (Berdy)

----------文 献----------

Kawagishi, H. et al., Tet. Lett., 1996, 37, 7399-7402, (分離, H-NMR, C13-NMR, 結晶構造)
Saito, T. et al., J. Antibiot., 1998, 51, 983-990, (分離, 誘導体)

§ Erinacine G
[CAS No.] 182927-59-9
[化合物分類] テルペノイド (Cyathane diterpenoids)
[構造式]

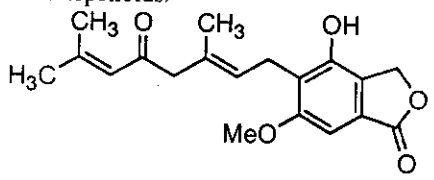


[分子式] $C_{35}H_{36}O_8$
[分子量] 464.555
[天然基原] 次の植物の代謝物: *Hericium erinaceum*
[比旋光度]: $[\alpha]_D^{25}$ -13 (c, 0.25 in MeOH)
UV: [neutral] λ_{max} 204 (ε 13000) (MeOH) [neutral] λ_{max} 204 (ε 13000) (MeOH) (Berdy)

----------文 献----------

Kawagishi, H. et al., Tet. Lett., 1996, 37, 7399-7402, (分離, H-NMR, C13-NMR)

§ Hericenone A
[CAS No.] 126654-52-2
[化合物分類] ベンゾフラノイド (Isobenzofurans), テルペノイド (Meroterpenoids)
[構造式]

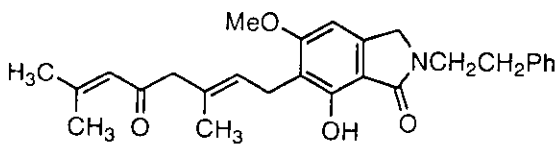


[分子式] $C_{19}H_{22}O_5$
[分子量] 330.38
[一般的性質] 構造式は 1992 年に改正された.
[天然基原] キノコ *Hericium erinaceum*
[用途] 細胞毒
[性状] 結晶 ($CHCl_3$)
[融点] Mp 100-102 ℃
UV: [base] λ_{max} (溶媒は報告されていない) (Derep) [neutral] λ_{max} 214 (ε 28600); 241 (sh) (ε 8600); 253 (ε 9000); 289 (sh) (ε 3000); 299 (ε 3200) (MeOH) (Derep)

----------文 献----------

Kawagishi, H. et al., Tet. Lett., 1990, 31, 373-376, (分離, H-NMR)
Rao, A.V.R. et al., Tet. Lett., 1992, 33, 4061-4064, (合成法, 構造)

§ Hericenone B
[CAS No.] 126654-53-3
[化合物分類] テルペノイド (Meroterpenoids), アルカロイド化合物 (Isoindoles)
[構造式]



[分子式] $C_{27}H_{31}NO_4$
[分子量] 433.546
[天然基原] 次の植物から分離: キノコ *Hericium erinaceum*
[用途] 細胞毒
[性状] 結晶 ($CHCl_3$)
[融点] Mp 136-138 ℃

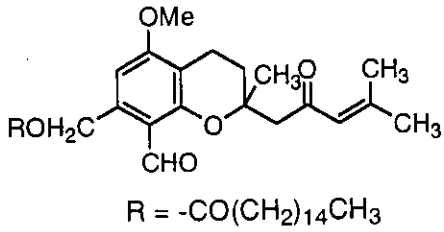
UV: [base] λ max (溶媒は報告されていない) (Derep) [neutral] λ max 214 (ε 45000); 235 (sh) (ε 16800); 248 (ε 17800) (MeOH) (Derep)

----------文献----------

Kawagishi, H. et al., Tet. Lett., 1990, 31, 373, (分離, H-NMR)

§ Hericenone F

[CAS No.] 141996-36-3
[化合物分類] ベンゾピラノイド (1-Benzopyrans)
[構造式]
[分子式] $C_{35}H_{54}O_6$
[分子量] 570.808
[天然基原] キノコ *Hericium erinaceum*
[性状] 青白い黄色のオイル
[その他のデータ] ラセミ体



R = $-CO(CH_2)_{14}CH_3$

----------文献----------

Kawagishi, H. et al., Phytochemistry, 1993, 32, 175, (分離, H-NMR, C13-NMR)

§ Hericenone G

[CAS No.] 141973-36-6
[化合物分類] ベンゾピラノイド (1-Benzopyrans)
[構造式] As Hericenone F with R = $-CO(CH_2)_{16}CH_3$
[分子式] $C_{37}H_{58}O_6$
[分子量] 598.862
[天然基原] キノコ *Hericium erinaceum*
[性状] 青白い黄色の板状結晶 ($CHCl_3$/EtOH)
[融点] Mp 56-58 ℃

----------文献----------

Kawagishi, H. et al., Phytochemistry, 1993, 32, 175, (分離, H-NMR, C13-NMR)

§ Hericenone H

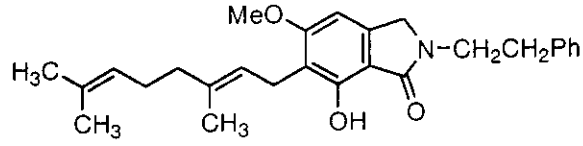
[CAS No.] 141973-37-7
[化合物分類] ベンゾピラノイド (1-Benzopyrans)
[構造式] As Hericenone F with R = $-CO(CH_2)_7CH{=}CHCH_2CH{=}CH(CH_2)_4CH_3$
[分子式] $C_{37}H_{54}O_6$
[分子量] 594.83
[天然基原] キノコ *Hericium erinaceum*
[性状] 青白い黄色のオイル

----------文献----------

Kawagishi, H. et al., Phytochemistry, 1993, 32, 175, (分離, H-NMR, C13-NMR)

§ Hericerin

[化学名・別名] 6-(3,7-Dimethyl-2,6-octadienyl) -2,3-dihydro-7-hydroxy-5-methoxy-2-(2-phenylethyl) -1*H*-isoindol-1-one (CAS 名)
[CAS No.] 140381-53-9
[化合物分類] アルカロイド化合物 (Isoindoles), テルペノイド (Meroterpenoids)
[構造式]
[分子式] $C_{27}H_{33}NO_3$
[分子量] 419.563
[天然基原] 次の植物から分離: キノコ *Hericium erinaceum*
[用途] 花粉成長阻害因子
[性状] 針状結晶 + 1/2H_2O (C_6H_6/EtOAc)
[融点] Mp 138-140 ℃



----------文献----------

Kimura, Y. et al., Agric. Biol. Chem., 1991, 55, 2673, (分離, H-NMR, C13-NMR)

§ 14-Hydroxy-3,5(10),11-cyathatrien-15-al; 14 β-form, 14-*O*-β-D-Xylopyranoside