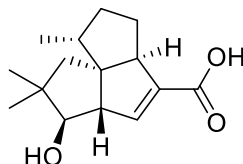


Pentalenic acid

Code No.: **BIA-P2453**

Pack sizes: **0.1 mg, 0.5 mg**



Synonyms :

Specifications

CAS #	: 69394-19-0
Molecular Formula	: C ₁₅ H ₂₂ O ₃
Molecular Weight	: 250.33
Source	: <i>Streptomyces UC5319</i>
Appearance	: Brown oil
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in methanol or DMSO

Application Notes

Pentalenic acid has been isolated from many *Streptomyces* sp. as a co-metabolite of the sesquiterpenoid antibiotic pentalenolactone and related natural products. Pentalenic acid is a shunt metabolite in the biosynthesis of the pentalenolactone family. Pentalenic acid itself is a useful polycyclic skeleton for structural modification. Members of the pentalenolactone family show antitumor, immunosuppressant and antidiabetic effects, but the bioprofile of pentalenic acid is largely unexplored.

References

1. Studies on the biosynthesis of pentalenolactone, Part II: Isolation of pentalenic acid and pentalenolactone H. Takamatsu S. et al. Tetrahedron Lett. 1978, 19, 4411.
2. Pentalenic acid is a shunt metabolite in the biosynthesis of the pentalenolactone family of metabolites: Hydroxylation of 1-deoxypentalenic acid mediated by CYP105D7 (SAV7469) of *Streptomyces avermitilis*. Takamatsu S. J Antibiot. 2011, 64, 65.
3. Syntheses of biologically active natural products and leading compounds for new pharmaceuticals employing effective construction of a polycyclic skeleton. Masataka I. Chem Pharm Bull. 2006, 54, 765.