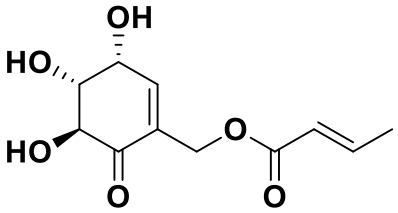
PRODUCT DATA SHEET

6-*epi*-COTC

(Cytotoxic)



Synonyms: 2-Crotonyloxymethyl-(4*R*,5*R*,6*S*)-4,5,6-trihydroxycyclohex-2-enone

Specifications

Code No.	: 14698
CAS#	: 959150-61-9
Molecular Formula	: $C_{11}H_{14}O_6$
Molecular Weight	: 242.227
Source	: *Streptomyces griseosporeus*
Supplied as	: Powder
Purity	: > 98% (HPLC)
Long Term Storage	: at -20 °C
Solubility	: Soluble in DMSO, H_2O It is recommended to avoid using alcohol such as MeOH or EtOH which may decrease the purity of 6-*epi*-COTC.

The chemical structure was confirmed by NMR and HRMS.

Application Notes

6-*epi*-COTC was isolated from the fermentation broth of *Streptomyces griseosporeus* MD287-CF4 and the structure was confirmed by x-ray crystallography.[1)] 6-*epi*-COTC was originally synthesized as a diastereomer of 2-crotonyloxymethyl-(4*R*,5*R*,6*R*)-4,5,6-trihydroxycyclohex-2-enone (COTC) which is isolated from *Streptomyces griseosporeus* MD287-CF4.[2)] 6-*epi*-COTC shows cytotoxic activities towards lung cancer cell lines A549 and H460 with the IC_{50} values of 170 and 158 μM, respectively.[2)]

References

1) The crystal structure data was deposited to the Cambridge crystallographic data centre as CCDC number 2149556.
2) Arene *cis*-dihydrodiols: Useful precursors for the preparation of analogues of the anti-tumor agent, 2-crotonyloxymethyl-(4*R*,5*R*,6*R*)-4,5,6-trihydroxycyclohex-2-enone (COTC). Arthurs C. L, *et al*. *Bioorg Med Chem Lett*. 2007 **17** 5974-5977.