Bipiperidine conjugates as soluble sugar surrogates in DNA-intercalating antiproliferative polyketides.

Ueberschaar N, Meyer F, Dahse HM, Hertweck C (2016) Bipiperidine conjugates as soluble sugar surrogates in DNA-intercalating antiproliferative polyketides. *Chem Commun (Camb)* 52(27), 4894-4897.

Details

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Abstract

DNA-intercalating polyketide glycosides are important leads for cancer therapeutics, yet their use is often limited by their low solubility and challenging synthetic protocols. To overcome these limitations, we employed 1,4'-bipiperidine-1'-carbamate residues as sugar surrogates in daunorubicin and chartreusin, yielding water-soluble derivatives and prodrugs with dramatically improved antiproliferative activities.

Involved units

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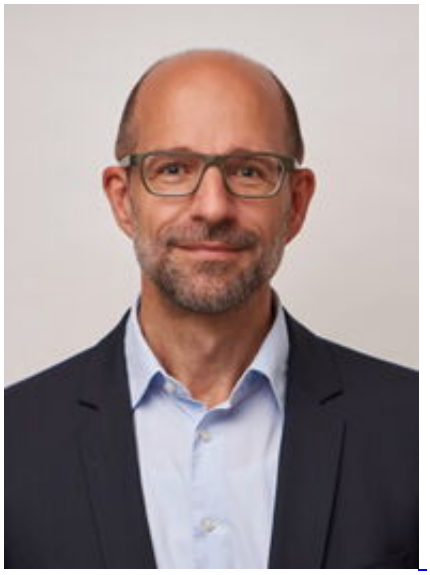
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doi: 10.1039/c6cc00890a

PMID: 26974406