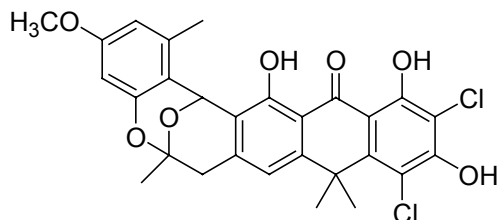


Bischloroanthrabenzoxocinone

Code: BIA-B1163

Pack sizes: 0.5 mg, 2.5 mg



Synonyms : (-)BABX

Specifications

CAS # : 866022-28-8
Molecular Formula : C₂₈H₂₄O₇Cl₂
Molecular Weight : 542.1
Source : *Streptomyces* sp. MST-AS5558
Appearance : Light orange residue
Purity : > 99% by HPLC
Long Term Storage : -20°C
Solubility : Soluble in ethanol, methanol, DMF or DMSO. Limited water solubility.

Application Notes

Bischloroanthrabenzoxocinone ((-)-BABX) is a selective inhibitor of Type II fatty acid synthesis (FASII). BABX showed IC₅₀ values of 11.4 and 35.3 µg/ml in the *S. aureus* and *E. coli* FASII assays, respectively, with comparable antibacterial activities. Type II fatty acid synthesis (FASII) is essential to bacterial cell viability and is a promising target for the development of novel antibiotics. More recently, BABX has been shown to inhibit agonist binding Liver X receptors (LXR). The receptors regulate the expression of the ABCA1 gene, which mediates the efflux of cholesterol from cells.

References

1. Determination of selectivity and efficacy of fatty acid synthesis inhibitors. Kodali S. et al., J. Biol. Chem. **2005**, 280, 1669.
2. Anthrabenzoxocinones from *Streptomyces* sp. as Liver X receptor ligands and antibacterial agents. Herath K. B. et al., J. Nat. Prod. **2005**, 68, 1437.