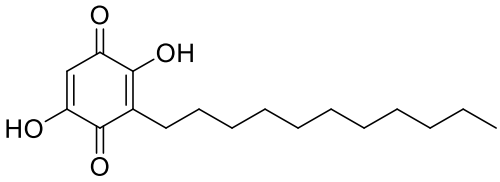
bioaustralis
fine chemicals

PRODUCT DATA SHEET

Embelin

Code No.: **BIA-E2354**

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



Synonyms : Embelic acid, Emberine, NSC 91874

Specifications

CAS #	:	**550-24-3**
Molecular Formula	:	**$C_{17}H_{26}O_4$**
Molecular Weight	:	**294.39**
Source	:	***Embelia ribes***
Appearance	:	**Orange solid**
Purity	:	**>95% by HPLC**
Long Term Storage	:	**-20°C**
Solubility	:	**Soluble in methanol or DMSO**

Application Notes

Embelin is benzoquinone metabolite isolated from Embelia ribes first reported in 1931. Embelin has a broad bioprofile, including antioxidant, anti-inflammatory, antitumor, antibacterial, antiviral, antidiabetic and anti-estrogenic activities. Embelin inhibits cell proliferation, induces G1 arrest and triggers apoptosis in CRPC cells, possibly via the Akt/NF-κB/survivin signaling pathway. Embelin is a privileged structure for the synthesis of antibacterial compounds.

References

1. CCLXXXVIII.—The constitution and synthesis of embelic acid (embelin), the active principle of Embelia Ribes. Hasan K.H. & Stedman E. J Chem Soc. 1931.
2. Antioxidant properties of embelin in cell culture: Electrochemistry and theoretical mechanism of scavenging. Potential scavenging of superoxide radical through the membrane cell. Caruso F. et al. Antioxidants 2020, 9, 382.
3. Inhibition of Akt/NF-κB/survivin pathway by embelin on castration-resistant prostate cancer cells Xu T. et al. Int J Clin Exp Med. 2017, 10, 4386.
4. Efficient multicomponent synthesis of diverse antibacterial embelin-privileged structure conjugates. Martin-Acosta P. et al. Molecules 2020, 25, 3290.

Updated: 11 June 2021

Building C, 28-54 Percival Road, Smithfield, NSW 2164, AUSTRALIA

Tel: 61 2 9757 4515 Fax: 61 2 9757 2586 Web: www.bioaustralis.com Email: info@bioaustralis.com