

#### PRODUCT DATA SHEET

Code No.: BIA-E2988

Pack sizes: 1 mg, 5 mg

# **Epanorin**

Synonyms : (-)-Epanorin, L-Epanorin

# Specifications

CAS # : 18463-10-0 Molecular Formula :  $C_{25}H_{25}NO_6$  Molecular Weight : 435.5

Source : Semi-synthetic
Appearance : Yellow solid
Purity : >95% by HPLC

Long Term Storage : -20°C

Solubility : Soluble in methanol and DMSO.

## **Application Notes**

Epanorin is a yellow crystalline pigment first isolated by Zopf from the lichen Lecanora epanora in 1900. Epanorin is a member of the pulvinic acid family, with a tetronic acid core bound to the amino acid, L-leucine. Epanorin is synthesised by reacting L-leucine methyl ester with pulvinic acid lactone. Epanorin inhibits the proliferation of MCF-7 breast cancer cells and murine myeloma NS-1 cells in vitro, but is inactive against HEK-293 and human fibroblast normal cell lines. Epanorin is modestly active against Giardia duodenalis.

## References

- Frank R.L. et al. (1950). The structures and syntheses of rhiizocarpic acid and epanorin. J. Am. Chem. Soc., 72, 4454.
- 2. Palacios-Moreno J. et al. (2019). Epanorin, a lichen secondary metabolite, inhibits proliferation of MCF-7 breast cancer cells. Biol Res., 52, 55.
- 3. James P.J.C. et al. (2023). Synthesis, characterization, and bioactivity of the lichen pigments pulvinamide, rhizocarpic acid, and epanorin and congeners. J. Nat. Prod., 86, 550.

For in vitro laboratory use only. Not for human or animal use.

Updated: 13 September 2024 © Copyright BioAustralis 2024