

### PRODUCT DATA SHEET

# Rhizocarpic acid

Code No.: BIA-R2992

Pack sizes: 1 mg, 5 mg



Synonyms

### Specifications

CAS #	:	18463-11-1
Molecular Formula	:	C <sub>28</sub> H <sub>23</sub> NO <sub>6</sub>
Molecular Weight	:	469.5
Source	:	Lecanora epanora
Appearance	:	Yellow solid
Purity	:	>95% by HPLC
Long Term Storage	:	-20°C
Solubility	:	Soluble in methanol and DMSO.

# **Application Notes**

Rhizocarpic acid is a yellow crystalline pigment, first isolated by Knop from several lichens, notably Rhizocarpon geographicum, in 1844. Rhizocarpic acid is a member of the pulvinic acid family, with a tetronic acid core bound to the methyl ester of L-phenylalanine. Rhizocarpic acid has weak activity against Bacillus subtilis, and moderate but selective activity against the murine myeloma cell line NS-1. The biosynthesis of rhizocarpic acid is induced by UV-B radiation, representing a chemical adaptation in high altitude lichen habitats.

#### References

- 1. Frank R. L. et al. (1950). The structures and syntheses of rhiizocarpic acid and epanorin. J. Am. Chem. Soc., 72, 4454.
- 2. 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.
- 3. Rubio C. et al. (2002). Effects of solar UV-B radiation in the accumulation of rhizocarpic acid in a lichen species from alpine zones of Chile. Boletin de la Sociedad Chilena de Quimica, 47, 67.

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