## bioaustralis

fine chemicals

## Lobaric acid



Synonyms : Usnetic acid

## Specifications

| CAS \# | $: \mathbf{5 2 2 - 5 3 - 2}$ |
| :--- | :--- |
| Molecular Formula | $: \mathbf{C}_{25} \mathbf{H}_{28} \mathrm{O}_{8}$ |
| Molecular Weight | $: \mathbf{4 5 6 . 5}$ |
| Source | $:$ Parmelia sp. |
| Appearance | $:$ White to off-white solid |
| Purity | $:>95 \%$ by HPLC |
| Long Term Storage | $: \mathbf{- 2 0}$ C |
| Solubility | $:$ Soluble in ethanol, methanol, DMF or DMSO. |

## Application Notes

Lobaric acid is a hydrophobic orcinol depsidone found in a broad range of lichen species, notably within the genera, Stereocaulon and Parmelia, first reported by Asahina and Nonamura in 1935. Like many other lichen acids, lobaric acid displays a broad pharmacology. Most recently, lobaric acid was shown to inhibit cysteinyl-leukotriene formation leading to muscle contraction in Taenia coli and type 12(S)-lipoxygenase, and to interfere with protein-protein interactions. Lobaric acid is an important standard in the chemotaxonomy of lichens.

## References

1. Untersuchungen uber flechtenstoffe, LVI. Mitteil.: Uber die konstitution der lobarsaure (I. Mitteil.). Asahina Y. and Nonomura S., Ber. Dtsch. Chem. Ges. 1935, 68, 1698.
2. Effect of lobaric acid on cysteinyl-leukotriene formation and contractile activity of guinea pig Taenia coli. Gissurarson S.R. et al., J. Pharmacol. Exp.Therap. 1997, 280, 770.
3. Sekikaic acid and lobaric acid target a dynamic interface of the coactivator CBP/p300. Majmudar C.Y. et al., Angew. Chem. Int. Ed. 2012, 51, 11258.
4. Anti-proliferative lichen compounds with inhibitory activity on $12(\mathrm{~S})$-HETE production in human platelets. Bucar F. et al., Phytomed. 2004, 11, 602.
5. A catalogue of standardized chromatographic data and biosynthetic relationships for lichen substances. Elix J., 2014, Third Edition. Published by the author, Canberra, Australia.
