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**Product Data Sheet**

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Product Name: Lobaric Acid

Cat. No.: GC18789

**Chemical Properties**

Cas. No. 522-53-2

Chemical Name 8-hydroxy-3-methoxy-11-oxo-1-(1-oxopentyl)-6-pentyl-11H-dibenzo[b,e]  
[1,4]dioxepin-7-carboxylic acidSMILES OC(C(C(O)=O)=C1CCCC)=CC2=C1OC(C=C(OC)C=C3C(CCCC)=O)=C3C(O2)=OFormula  $C_{25}H_{28}O_8$  M.Wt 456.5

Solubility DMF: Soluble, DMSO: Soluble, Ethanol: Soluble, Methanol: Soluble Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure **Background**

Lobaric acid is a depsidone metabolite that has been isolated from *Stereocaulon* lichen species with antioxidant, antiproliferative, antiviral, and enzyme inhibitory activities. It scavenges superoxide radicals in a cell-free assay (IC<sub>50</sub> = 97.9 μmol) and inhibits proliferation in a panel of leukemia, colorectal, gastric, breast, ovarian, prostate, pancreatic, and lung cancer cell lines (EC<sub>50</sub>s = 15.2-63.9 μg/ml). Lobaric acid inhibits protein tyrosine phosphatase 1B (PTP1B; IC<sub>50</sub> = 0.87 μM for the human recombinant enzyme) and production of 12(S)-HETE by 12(S)-lipoxygenase (IC<sub>50</sub> = 28.5 μM). In vivo, lobaric acid (250 μM) decreases lesion number, but not lesion diameter, in tobacco leaves infected with tobacco mosaic virus (TMV).

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA