CPI-613  
Item No. 16981

CAS Registry No.: 95809-78-2  
Formal Name: 6,8-bis[(phenylmethyl)thio]-octanoic acid  
MF: C₂₂H₂₈O₂S₂  
FW: 388.6  
Purity: ≥98%  
Stability: ≥2 years at -20°C  
Supplied as: A crystalline solid

Laboratory Procedures
For long term storage, we suggest that CPI-613 be stored as supplied at -20°C. It should be stable for at least two years. CPI-613 is supplied as a crystalline solid. A stock solution may be made by dissolving the CPI-613 in the solvent of choice. CPI-613 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of CPI-613 in ethanol is approximately 50 mg/ml and approximately 50 mg/ml in DMSO and DMF.

CPI-613 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CPI-613 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. CPI-613 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Lipoic acid (Item No. 10005728) is a natural organosulfur compound that serves as a cofactor in various complexes, including the α-ketoglutarate dehydrogenase complex, which is involved in the citric acid cycle as well as other pathways. CPI-613 is a lipoic acid analog that inhibits α-ketoglutarate dehydrogenase, particularly in tumor cells.1 At 60-240 µM, CPI-613 induces a strong mitochondrial burst of reactive oxygen species, resulting in cell death.1 By disrupting mitochondrial metabolism, CPI-613 demonstrates both in vitro and in vivo anti-tumor activity through both apoptotic and non-apoptotic pathways.2-4

References

Related Products
For a list of related products please visit: www.caymanchem.com/catalog/16981

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Cayman Chemical Company makes no warranty or guaranty of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman warrants only to the original customer that the material will meet our specifications at the time of delivery. Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have any obligation or liability, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.

Buyer's exclusive remedy and Cayman's sole liability hereunder shall be limited to a refund of the purchase price, or at Cayman's option, the replacement, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

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