5-Nitroso-8-quinolinol
Item No. 13856

CAS Registry No.: 3565-26-2
Formal Name: 5-nitroso-8-quinolinol
Synonyms: Hydron III, NSC 3852
MF: C9H6N2O2
FW: 174.2
Purity: ≥95%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis: λmax= 219, 330, 381 nm

Laboratory Procedures
For long term storage, we suggest that 5-nitroso-8-quinolinol be stored as supplied at -20°C. It should be stable for at least two years.

5-Nitroso-8-quinolinol is supplied as a crystalline solid. A stock solution may be made by dissolving the 5-nitroso-8-quinolinol in the solvent of choice. 5-Nitroso-8-quinolinol is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of 5-nitroso-8-quinolinol in these solvents is approximately 2 and 1 mg/ml, respectively.

5-Nitroso-8-quinolinol is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 5-nitroso-8-quinolinol should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. 5-Nitroso-8-quinolinol has a solubility of approximately 0.2 mg/ml in a 1:5 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

5-Nitroso-8-quinolinol is a chemically unique HDAC inhibitor that harbors a different Zn2+ chelation motif compared to SAHA. As an antitumor agent, 10 μM 5-nitroso-8-quinolinol can induce oxidative stress contributing to apoptosis and differentiation in MCF-7 breast cancer cells. Additionally, 5-nitroso-8-quinolinol inhibits T. gondii tachyzoite propagation in human fibroblasts with an EC50 value of 80 nM and inhibits P. falciparum growth in human red blood cells with an EC50 value of 1.3 μM.

References

Related Products
For a list of related products please visit: www.caymanchem.com/catalog/13856

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

MATERIAL 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 Material Safety Data Sheet, which has been sent with your email to your institution.

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