CAY10564
Item No. 10010527

Formal Name: 4-chloro-4-phenyl-1,3,2-oxathiazolidine-5-one
Synonym: 4-(p-chlorophenyl)-1,3,2-Oxathiazolylium-5-olate
MF: C$_8$H$_6$ClNO$_2$S
FW: 215.7
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis.: $\lambda_{\text{max}}$ 202, 262, 412 nm

Laboratory Procedures
For long term storage, we suggest that CAY10564 be stored as supplied at -20°C. It should be stable for at least two years.
CAY10564 is supplied as a crystalline solid. A stock solution may be made by dissolving the CAY10564 in an organic solvent purged with an inert gas. CAY10564 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of CAY10564 in these solvents is approximately 20 mg/ml.
CAY10564 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CAY10564 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. CAY10564 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

S-Nitrosothiols (RSNOs) are a class of molecules that function as exogenous and endogenous nitric oxide (NO) donors. RSNOs found in vivo include proteins such as S-nitrosohemoglobin and S-nitrosoalbumin, as well as low molecular weight species such as S-nitrosothioglutathione (GSNO) and S-nitrosocysteine (CysNO). CAY10564 is a member of a new class of S-nitrosothiol species that act as NO donors under acidic conditions. It decomposes with a half-life of 15 minutes in 0.1 M phosphate buffer, pH 5.0, at 37°C and relaxes phenylephrine-constricted rat aortic strips 63% and 37% at pH 6.0 and 7.4, respectively.1

Reference

Related Products
For a list of related products please visit: www.caymanchem.com/catalog/10010527