

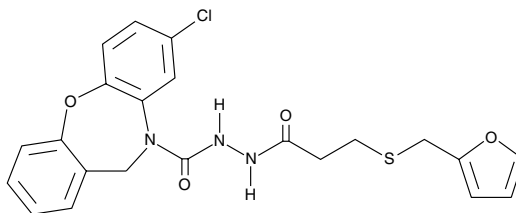
Product Information



SC-51322

Item No. 10010744

CAS Registry No.: 146032-79-3
Formal Name: 8-chloro-2-[3-[(2-furanylmethyl)thio]-1-oxopropyl]hydrazide, dibenz[b,f][1,4]oxazepine-10(11H)-carboxylic acid
MF: C₂₂H₂₀ClN₃O₄S
FW: 457.9
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid



Laboratory Procedures

For long term storage, we suggest that SC-51322 be stored as supplied at -20°C. It should be stable for at least two years. SC-51322 is supplied as a crystalline solid. A stock solution may be made by dissolving the SC-51322 in the solvent of choice. SC-51322 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of SC-51322 is approximately 30 mg/ml in ethanol and approximately 20 mg/ml in DMSO and DMF.

SC-51322 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, SC-51322 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. SC-51322 has a solubility of approximately 0.3 mg/ml in a 1:2 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

The prostaglandin E₂ (PGE₂) receptor EP₁ is involved in triggering PGE₂-mediated pain as well as neuronal survival and growth. SC-51322 is a selective EP₁ antagonist that inhibits PGE₂ signaling in a guinea pig ileum muscle strip assay with a pA₂ value of 8.1 and demonstrates analgesic activity in a mouse writhing assay with an ED₅₀ value of 0.9 mg/kg.¹ It is pharmacologically similar to SC-51089, but does not release hydrazine, a known carcinogen to rats, as does SC-51089.¹ SC-51322 potentiates the vasorelaxation of human pulmonary vein induced by PGE₂ with an EC₅₀ value of 7.75 μM.²

References

- Hallinan, E.A., Hagen, T.J., Tsymbalov, S., *et al.* Aminoacetyl moiety as a potential surrogate for diacylhydrazine group of SC-51089, a potent PGE₂ antagonist, and its analogs. *J. Med. Chem.* **39**, 609-613 (1996).
- Foudi, N., Kotelevets, L., Louedec, L., *et al.* Vasorelaxation induced by prostaglandin E₂ in human pulmonary vein: Role of the EP₄ receptor subtype. *Br. J. Pharmacol.* **154**, 1631-1639 (2008).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/10010744

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.

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