

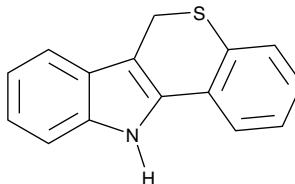
Product Information



PD 146176

Item No. 10010518

CAS Registry No.: 4079-26-9
Formal Name: 6,11-dihydro-[1]benzothiopyrano[4,3-b]indole
Synonym: NSC 168807
MF: C₁₅H₁₁NS
FW: 237.3
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid



Laboratory Procedures

For long term storage, we suggest that PD 146176 be stored as supplied at -20°C. It should be stable for at least two years.

PD 146176 is supplied as a crystalline solid. A stock solution may be made by dissolving the PD 146176 in an organic solvent purged with an inert gas. PD 146176 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of PD 146176 in ethanol is approximately 2 mg/ml, and in DMSO and DMF it is approximately 10 mg/ml.

PD 146176 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, PD 146176 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. PD 146176 has a solubility of approximately 0.15 mg/ml in a 1:5 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

PD 146176 is a potent and selective inhibitor of reticulocyte 15-lipoxygenase-1.¹ It limits hypercholesterolemia-induced atherosclerosis in New Zealand White rabbits^{1,2} and reduces oxidant stress-induced apoptosis in endothelial cells.³ PD 146176 inhibits amyloid β protein aggregate formation without changing total levels of amyloid β precursor protein (APP) in cells stably expressing APP.⁴ In addition, it lacks significant non-specific antioxidant properties.²

References

1. Bocan, T.M.A., Rosebury, W.S., Mueller, S.B., *et al.* A specific 15-lipoxygenase inhibitor limits the progression and monocyte-macrophage enrichment of hypercholesterolemia-induced atherosclerosis in the rabbit. *Atherosclerosis* **136**, 203-216 (1998).
2. Sendobry, S.M., Cornicelli, J.A., Welch, K., *et al.* Attenuation of diet-induced atherosclerosis in rabbits with a highly selective 15-lipoxygenase inhibitor lacking significant antioxidant properties. *Brit. J Pharmacol.* **120**, 1199-1206 (1997).
3. Sordillo, L.M., Weaver, J.A., Cao, Y.-Z., *et al.* Enhanced 15-HPETE production during oxidant stress induces apoptosis of endothelial cells. *Prostaglandins & other Lipid Mediators* **76**, 19-34 (2005).
4. Succol, F. and Praticò, D. A role for 12/15 lipoxygenase in the amyloid β precursor protein metabolism. *J. Neurochem.* **103**, 380-387 (2007).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/10010518

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

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