PRODUCT INFORMATION



RHC-80267

Item No. 16432

CAS Registry No.: 83654-05-1

Formal Name: 1,1'-[O,O'-[1,6-hexanediylbis(iminocarbonyl)]dioxime]

Synonym: U-57908 MF: $C_{20}H_{34}N_4O_4$ FW: 394.5 **Purity:** ≥95%

A crystalline solid Supplied as:

Storage: -20°C Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

RHC-80267 is supplied as a crystalline solid. A stock solution may be made by dissolving the RHC-80267 in the solvent of choice, which should be purged with an inert gas. RHC-80267 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of RHC-80267 in ethanol and DMSO is approximately 5 mg/ml and approximately 15 mg/ml in DMF.

RHC-80267 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, RHC-80267 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. RHC-80267 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

RHC-80267 is an inhibitor of diacylglycerol lipase (DAGL; $IC_{50} = 4 \mu M$ for the canine platelet enzyme).¹ It also inhibits the serine hydrolases KIAA1363, fatty acid amide hydrolase (FAAH), BAT5, phospholipase A₂ (PLA₂), hormone-sensitive lipase (HSL), and acetylcholinesterase (AChE) by greater than 60% when used at a concentration of 50 μM.² RHC-80267 (0.1-10 μM) potentiates ACh-induced relaxation of isolated rat mesenteric arteries.3

References

- 1. Sutherland, C.A. and Amin, D. Relative activities of rat and dog platelet phospholipase A₂ and diglyceride lipase. Selective inhibition of diglyceride lipase by RHC 80267. J. Biol. Chem. 257(23), 14006-14010 (2014).
- 2. Hoover, H.S., Blankman, J.L., Niessen, S., et al. Selectivity of inhibitors of endocannabinoid biosynthesis evaluated by activity-based protein profiling. Bioorg. Med. Chem. Lett. 18, 5838-5841 (2008).
- 3. Ghisdal, P., Vandenberg, G., Hamaide, M.-C., et al. The diacylglycerol lipase inhibitor RHC-80267 potentiates the relaxation to acetylcholine in rat mesenteric artery by anti-cholinesterase action. Eur. J. Pharmacol. 517(1-2), 97-102 (2005).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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