PRODUCT INFORMATION



CAY10404

Item No. 70210

CAS Registry No.: Formal Name:	340267-36-9 3-[4-(methylsulfonyl)phenyl]-4-phenyl-5- (trifluoromethyl)-isoxazole	
MF:	$C_{17}H_{12}F_3NO_3S$	
FW:	367.4) i construction i constructi construction i construction i construction i construction i constr
Purity:	≥98%	F ₃ C
UV/Vis.:	λ _{max} : 239 nm	
Supplied as:	A crystalline solid	
Storage:	-20°C	
Stability:	≥4 years	
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.		

Laboratory Procedures

CAY10404 is supplied as a crystalline solid. A stock solution may be made by dissolving the CAY10404 in the solvent of choice, which should be purged with an inert gas. CAY10404 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of CAY10404 in DMF is approximately 21 mg/ml and approximately 17 mg/ml in ethanol and DMSO.

CAY10404 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CAY10404 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. CAY10404 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

CAY10404 is an inhibitor of COX-2 (IC₅₀ = <1 nM).¹ It is selective for COX-2 over COX-1 (IC₅₀ = >500 μ M). CAY10404 inhibits the proliferation of SH-EP and SH-SY5Y neuroblastoma cells $(IC_{50}s = -60 \ \mu M$ for both), and induces apoptosis and cell cycle arrest at the G₂/M phase in the same cells.² It inhibits carrageenan-induced paw edema in rats when administered at a dose of 10 mg/kg.¹

References

- 1. Habeeb, A.G., Rao, P.N.P., and Knaus, E.E. Design and syntheses of diarylisoxazoles: Novel inhibitors of cyclooxygenase-2 (COX-2) with analgesic-antiinflammatory activity. Drug Dev. Res. 51(4), 273-286 (2000).
- 2. Parashar, B., Shankar, S.L., O'Guin, K., et al. Inhibition of human neuroblastoma cell growth by CAY10404, a highly selective Cox-2 inhibitor. J. Neurooncol. 71(2), 141-148 (2005).

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

SAFETY DATA

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.

WARRANTY AND LIMITATION OF REMEDY

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