PRODUCT INFORMATION



JCP174

Item No. 21866

CAS Registry No.:	126062-19-9	
Formal Name:	7-amino-4-chloro-3-propoxy-1H-2-	
	benzopyran-1-one	ÇI
Synonym:	7-amino-4-chloro-3-Propoxyisocoumarin	
MF:	$C_{12}H_{12}CINO_3$	
FW:	253.7	
Purity:	≥98%	
UV/Vis.:	λ _{max} : 239, 291 nm	$H_2N^2 \longrightarrow \prod_{i=1}^{N}$
Supplied as:	A crystalline solid	0
Storage:	-20°C	
Stability:	≥4 years	
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.		

Laboratory Procedures

JCP174 is supplied as a crystalline solid. A stock solution may be made by dissolving the JCP174 in the solvent of choice. JCP174 is soluble in the organic solvent DMSO, which should be purged with an inert gas.

Description

JCP174 is an inhibitor of palmitoyl protein thioesterase-1 (TgPPT1), a depalmitoylase in the parasite T. gondii.¹ JCP174 enhances invasion of tachyzoites into BSC-1 host cells, increasing the number of attached and invaded parasites when used at a concentration of 50 μ M, enhancing plaque formation at concentrations of 0.5 and 50 μ M, and increasing gliding motility. JCP174 is also an inhibitor of porcine pancreatic elastase and human leukocyte elastase.^{2,3}

References

- 1. Child, M.A., Hall, C.I., Beck, J.R., et al. Small-molecule inhibition of a depalmitoylase enhances Toxoplasma host-cell invasion. Nat. Chem. Biol. 9(10), 651-656 (2013).
- 2. Powers, J.C., Oleksyszyn, J., Narasimhan, S.L., et al. Reaction of porcine pancreatic elastase with 7-substituted 3-alkoxy-4-chloroisocoumarins: Design of potent inhibitors using the crystal structure of the complex formed with 4-chloro-3-ethoxy-7-guanidinoisocoumarin. Biochemistry 29(12), 3108-3118 (1990).
- 3. Kerrigan, J.E., Oleksyszyn, J., Kam, C.-M., et al. Mechanism-based isocoumarin inhibitors for human leukocyte elastase. Effect of the 7-amino substituent and 3-alkoxy group in 3-alkoxy-7-amino-4-chloroisocoumarins on inhibitory potency. J. Med. Chem. 38(3), 544-552 (1995).

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

SAFFTY 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.

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