PRODUCT INFORMATION



Src Kinase Inhibitor I

Item No. 14592

CAS Registry No.:	179248-59-0	
Formal Name:	6,7-dimethoxy-N-(4-phenoxyphenyl)-	
	4-quinazolinamine	
MF:	$C_{22}H_{19}N_{3}O_{3}$	H
FW:	373.4	N Ý Ý
Purity:	≥98%	
UV/Vis.:	λ _{max} : 223, 253, 344 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

Src kinase inhibitor I is supplied as a crystalline solid. A stock solution may be made by dissolving the Src kinase inhibitor I in the solvent of choice, which should be purged with an inert gas. Src kinase inhibitor I is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of Src kinase inhibitor I in these solvents is approximately 2.5 and 0.25 mg/ml, respectively.

Src kinase inhibitor I is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, Src kinase inhibitor I should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Src kinase inhibitor I has a solubility of approximately 0.33 mg/ml in a 1:2 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

The Src kinases constitute a family of non-receptor tyrosine kinases, which includes Src and Lck. Src kinase inhibitor I is a potent competitive inhibitor of both Src and Lck (IC₅₀ = 44 and 88 nM, respectively), as well as Csk and Yes.^{1,2} It less effectively blocks the receptor tyrosine kinases VEGFR2 and C-fms (IC₅₀ = 0.32 and 30 μ M), as well as a long list of serine/threonine kinases.^{1,2} Src kinase inhibitor I also inhibits receptor-interacting protein-2 with an IC₅₀ value of 26 nM.²

References

- 1. Tian, G., Cory, M., Smith, A.A., et al. Structural determinants for potent, selective dual site inhibition of human pp60c-src by 4-anilinoquinazolines. Biochemistry 40(24), 7084-7091 (2001).
- 2. Bain, J., Plater, L., Elliot, M., et al. The selectivity of protein kinase inhibitors: A further update. Biochem. J. 408(3), 297-315 (2007).

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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