# **PRODUCT** INFORMATION



## NIH 12848

Item No. 26035

CAS Registry No.: Formal Name:	959551-10-1 N-(2-thienylmethyl)-2-[2-(trifluoromethyl)	N N
МГ.	phenyl]-4-quinazolinamine	
	$C_{20}H_{14}F_{3}N_{3}S$	
FW:	385.4	
Purity:	≥95%	N N
UV/Vis.:	λ <sub>may</sub> : 231, 317 nm	
Supplied as:	A crystalline solid	
Storage:	-20°C	s´ 丶
Stability:	≥4 years	
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.		

#### Laboratory Procedures

NIH 12848 is supplied as a crystalline solid. A stock solution may be made by dissolving the NIH 12848 in the solvent of choice, which should be purged with an inert gas. NIH 12848 is soluble in the organic solvent DMSO at a concentration of approximately 25 mg/ml.

### Description

NIH 12848 is an inhibitor of phosphatidylinositol 5-phosphate 4-kinase  $\gamma$  (PI5P4K $\gamma$ ; IC<sub>50</sub> = ~1  $\mu$ M).<sup>1</sup> It is selective for PI5P4K $\gamma$  over PI5P4K $\alpha$  and PI5P4K $\beta$  (IC<sub>50</sub>s = >100  $\mu$ M). NIH 12848 inhibits translocation of the Na<sup>+</sup>/K<sup>+</sup>-ATPase to the plasma membrane in mouse principal kidney cortical collecting duct (mpkCCD) cells. NIH 12848 is also an inhibitor of USP1/UAF complex deubiquitinase activity (IC<sub>50</sub> = 7.9  $\mu$ M).<sup>2</sup> It increases accumulation of monoubiquitinated proliferating cell nuclear antigen (PCNA) in H1299 non-small cell lung cancer (NSCLC) cells when used at a concentration of 20  $\mu$ M.

#### References

- 1. Clarke, J.H., Giudici, M.L., Burke, J.E., et al. The function of phosphatidylinositol 5-phosphate 4-kinase y (PI5P4Ky) explored using a specific inhibitor that targets the PI5P-binding site. Biochem. J. 466(2), 359-367 (2015).
- 2. Dexheimer, T.S., Rosenthal, A.S., Luci, D.K., et al. Synthesis and structure-activity relationship studies of N-benzyl-2-phenylpyrimidin-4-amine derivatives as potent USP1/UAF1 deubiquitinase inhibitors with anticancer activity against nonsmall cell lung cancer. J. Med. Chem. 57(19), 8099-8110 (2014).

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.

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1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897 [734] 971-3335 FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.CAYMANCHEM.COM