

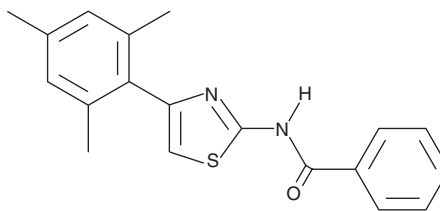
PRODUCT INFORMATION



INH6

Item No. 21772

CAS Registry No.: 1001753-24-7
Formal Name: N-[4-(2,4,6-trimethylphenyl)-2-thiazolyl]-benzamide
MF: C₁₉H₁₈N₂OS
FW: 322.4
Purity: ≥98%
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

INH6 is supplied as a crystalline solid. A stock solution may be made by dissolving the INH6 in the solvent of choice, which should be purged with an inert gas. INH6 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of INH6 in these solvents is approximately 1, 20, and 30 mg/ml, respectively.

INH6 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, INH6 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. INH6 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

INH6 is an inhibitor of the oncogene high expression in cancer 1 (Hec1) and its regulator, the serine-threonine kinase Nek2, which together regulate mitotic spindle formation.^{1,2} It inhibits proliferation in human breast, cervical, and leukemia cell lines with IC₅₀ values of 1.7 and 2.1, 2.4, and 2.5 μM, respectively, for MDA-MB-231 and MDA-MB-468, HeLa, and K562 cells.¹ INH6 co-precipitates with cellular Hec1, reduces Nek2 protein levels when administered to HeLa cells at 6.25 μM, disrupts spindle formation, and induces apoptosis.

References

1. Qiu, X.-L., Li, G., Wu, G., *et al.* Synthesis and biological evaluation of a series of novel inhibitor of Nek2/Hec1 analogues. *J. Med. Chem.* **52**(6), 1757-1767 (2009).
2. Lee, Y.-S., Chuang, S.-H., Huang, L.Y., *et al.* Discovery of 4-aryl-N-arylcarbonyl-2-aminothiazoles as Hec1/Nek2 inhibitors. Part I: Optimization of in vitro potencies and pharmacokinetic properties. *J. Med. Chem.* **57**(10), 4098-4110 (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.

WARRANTY AND LIMITATION OF REMEDY

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