

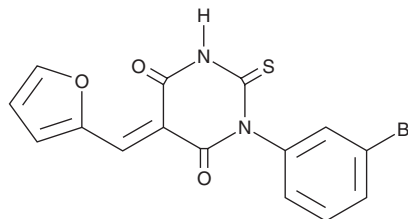
PRODUCT INFORMATION



SMIFH2

Item No. 31517

CAS Registry No.: 340316-62-3
Formal Name: 1-(3-bromophenyl)-5-(2-furanylmethylene)dihydro-2-thioxo-4,6(1H,5H)-pyrimidinedione
MF: C₁₅H₉BrN₂O₃S
FW: 377.2
Purity: ≥98% (mixture of isomers)
Supplied as: A 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

SMIFH2 is supplied as a solid. A stock solution may be made by dissolving the SMIFH2 in the solvent of choice, which should be purged with an inert gas. SMIFH2 is soluble in the organic solvent DMSO at a concentration of approximately 100 mM.

Description

SMIFH2 is an inhibitor of formin homology 2 (FH2) domains.¹ It inhibits assembly of profilin-actin mediated by mouse formin mDia1(FH1FH2) with an IC₅₀ value of approximately 15 μM. It also inhibits actin assembly mediated by FH1FH2 constructs of mDia2, *C. elegans* CYK-1, *S. pombe* Cdc12 or Fus1, or *S. cerevisiae* Bni1. SMIFH2 (25 μM) disassembles formin-dependent actin cables and contractile rings, but not Arp2/3-dependent actin patches, in fission yeast. It is cytotoxic to NIH3T3 fibroblasts (IC₅₀ = 28 μM). SMIFH2 (10 μM) increases and decreases the percentage of NIH3T3 cells with thin and thick F-actin bundles, respectively.

Reference

1. Rizvi, S.A., Neidt, E.M., Cui, J., *et al.* Identification and characterization of a small molecule inhibitor of formin-mediated actin assembly. *Chem. Biol.* **16(11)**, 1158-1168 (2009).

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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