

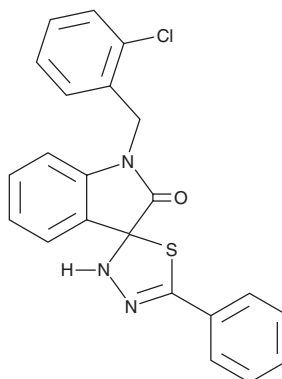
PRODUCT INFORMATION



CFM 4

Item No. 36780

CAS Registry No.: 331458-02-7
Formal Name: 1-[(2-chlorophenyl)methyl]-5'-phenyl-spiro[3H-indole-3,2'(3'H)-[1,3,4]thiadiazol]-2(1H)-one
MF: C₂₂H₁₆ClN₃OS
FW: 405.9
Purity: ≥98%
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

CFM 4 is supplied as a solid. A stock solution may be made by dissolving the CFM 4 in the solvent of choice, which should be purged with an inert gas. CFM 4 is soluble in the organic solvent DMSO at a concentration of approximately 25 mg/ml.

Description

CFM 4 is an inhibitor of the protein-protein interaction between anaphase-promoting complex subunit 2 (APC2) and cell cycle and apoptosis regulatory protein 1 (CARP-1).¹ It inhibits the binding of APC2 to CARP-1 (IC₅₀ = 0.75 μM). CFM 4 reduces the proliferation of a variety of breast, prostate, and colon cancer cells in a concentration-dependent manner. It induces cell cycle arrest at the G₀ phase in MDA-MB-468 breast cancer cells and apoptosis in T47D breast cancer cells when used at a concentration of 20 μM. Nanostructure lipid carrier-encapsulated CFM 4 (40 mg/kg every other day) reduces tumor growth in an A549 non-small cell lung cancer (NSCLC) mouse xenograft model.²

References

1. Puliappadamba, V.T., Wu, W., Bevis, D., *et al.* Antagonists of anaphase-promoting complex (APC)-2-cell cycle and apoptosis regulatory protein (CARP)-1 interaction are novel regulators of cell growth and apoptosis. *J. Biol. Chem.* **286(44)**, 38000-38017 (2011).
2. Muthu, M., Somagoni, J., Cheriyan, V.T., *et al.* Identification and testing of novel CARP-1 functional mimetic compounds as inhibitors of non-small cell lung and triple negative breast cancers. *J. Biomed. Nanotechnol.* **11(9)**, 1608-1627 (2015).

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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CAYMAN CHEMICAL

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