

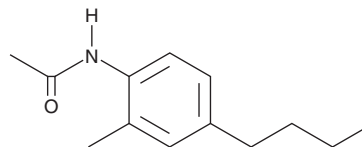
PRODUCT INFORMATION



SMIP004

Item No. 40645

CAS Registry No.: 143360-00-3
Formal Name: N-(4-butyl-2-methylphenyl)-acetamide
Synonyms: SKP2 E3 Ligase Inhibitor II,
S-phase Kinase-associated Protein 2 E3 Ligase
Inhibitor 11
MF: C₁₃H₁₉NO
FW: 205.3
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

SMIP004 is supplied as a solid. A stock solution may be made by dissolving the SMIP004 in the solvent of choice, which should be purged with an inert gas. SMIP004 is soluble (≥10 mg/ml) in ethanol and DMSO.

Description

SMIP004 is an inhibitor of the E3 ubiquitin ligase S-phase kinase-associated protein 2 (SKP2).¹ It reduces the levels of SKP2 and induces the accumulation of p27^{Kip1} and p21^{Cip21}, ubiquitination targets of SKP2, in LNCaP-S14 human prostate cancer cells overexpressing SKP2 when used at a concentration of 40 μM. SMIP004 is cytotoxic to LNCaP-S14 cells (IC₅₀ = 1.09 μM) but not non-cancerous IMR-90 human fibroblasts. It also targets cyclin D1 for proteasomal degradation, as well as induces the unfolded protein response, oxidative stress, apoptosis, and cell cycle arrest at the G₁ phase in LNCaP-S14 cells.² SMIP004 (2 mg/kg) reduces immobility time in the forced swim test and tail suspension test, as well as increases the preference for sucrose in the sucrose preference test, in a mouse model of chronic unpredictable stress-induced depression.

References

1. Rico-Bautista, E., Yang, C.C., Lu, L., *et al.* Chemical genetics approach to restoring p27^{Kip1} reveals novel compounds with antiproliferative activity in prostate cancer cells. *BMC Biol.* **8**, 153 (2010).
2. Rico-Bautista, E., Zhu, W., Kitada, S., *et al.* Small molecule-induced mitochondrial disruption directs prostate cancer inhibition via UPR signaling. *Oncotarget.* **4**(8), 1212-1229 (2013).

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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