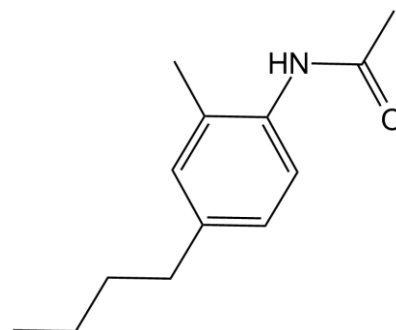


## Product Data Sheet

### Chemical Properties

<b>Product Name:</b>	SMIP004
<b>Cas No.:</b>	143360-00-3
<b>M.Wt:</b>	205.3
<b>Formula:</b>	C <sub>13</sub> H <sub>19</sub> NO
<b>Synonyms:</b>	SMIP 004;SMIP-004
<b>Chemical Name:</b>	N-(4-butyl-2-methylphenyl)acetamide
<b>Canonical SMILES:</b>	<chem>CCCCC1=CC(=C(C=C1)NC(=O)C)C</chem>
<b>Solubility:</b>	≥20.5mg/mL in DMSO
<b>Storage:</b>	Store at -20°C
<b>General tips:</b>	For obtaining a higher solubility , please warm the tube at 37° C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20° C for several months.
<b>Shopping Condition:</b>	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request



### Biological Activity

<b>Targets :</b>	Apoptosis
<b>Pathways:</b>	Apoptosis Inducers

#### Description:

IC<sub>50</sub> Value: 1.09 uM (MTT assay in LNCaP-S14 cells) [1] SMIP004 (N-(4-butyl-2-methyl-phenyl)acetamide) is a novel inducer of cancer-cell selective apoptosis of human prostate cancer cells. Unlike SMIP001, SMIP004 was found to downregulate SKP2 and to stabilize p27, although neither SMIP is a proteasome inhibitor. *in vitro*: Whereas SMIP012 and 016 were moderately toxic in normal fibroblasts, SMIPs 001 and 004 showed substantial cancer cell specificity being at least five times more potent in LNCaP-S14 than in IMR90 cells , treatment with either MG132 or SMIP004 increased p27 half-life to > 6 h [1]. Both SMIP001 and 004 led to a strong increase in the

recruitment of p27 to CDK2, while SMIP001 also slightly increased coprecipitation of p21 (Figure 6c). SMIP004 also reduced the amounts of cyclins E and A retrieved with CDK2. This was paralleled by a marked downregulation of cyclins E and A upon SMIP004 treatment. SMIP004 decreased the levels of positive cell cycle regulators, upregulated cyclin-dependent kinase inhibitors, and resulted in G1 arrest, inhibition of colony formation in soft agar, and cell death [2]. in vivo: SMIP004 potently inhibits the growth of prostate and breast cancer xenografts in mice [2]. Clinical trial: N/A

**Reference:**

## Caution

**FOR RESEARCH PURPOSES ONLY.**

**NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

*Specific storage and handling information for each product is indicated on the product datasheet. Most ApexBio products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.*

**APEXBio Technology**

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