

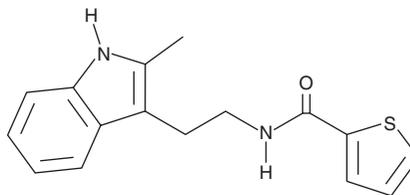
# PRODUCT INFORMATION



**CK-636**

Item No. 16243

**CAS Registry No.:** 442632-72-6  
**Formal Name:** N-[2-(2-methyl-1H-indol-3-yl)ethyl]-2-thiophenecarboxamide  
**MF:** C<sub>16</sub>H<sub>16</sub>N<sub>2</sub>OS  
**FW:** 284.4  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 226, 273 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥-2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

## Laboratory Procedures

CK-636 is supplied as a crystalline solid. A stock solution may be made by dissolving the CK-636 in the solvent of choice, which should be purged with an inert gas. CK-636 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of CK-636 in these solvents is approximately 2, 1, and 0.5 mg/ml, respectively.

## Description

CK-636 is an inhibitor of Arp2/3 complex action that binds the complex and inhibits actin polymerization *in vitro*, using human, bovine and fission yeast proteins (IC<sub>50</sub>s = 4, 32, and 24 μM, respectively).<sup>1</sup> It is cell permeable, as it prevents actin polymerization and the formation of actin filament comet tails by *Listeria* in infected SKOV3 cells (IC<sub>50</sub> = 22 μM).<sup>1</sup> CK-636 is used to explore the role of Arp2/3 complex in cellular functions, including epidermal barrier formation and T cell migration.<sup>2,3</sup>

## References

1. Nolen, B.J., Tomasevic, N., Russell, A., *et al.* Characterization of two classes of small molecule inhibitors of Arp2/3 complex. *Nature* **460(7258)**, 1031-1034 (2009).
2. Zhou, K., Muroyama, A., Underwood, J., *et al.* Actin-related protein2/3 complex regulates tight junctions and terminal differentiation to promote epidermal barrier formation. *Proc. Natl. Acad. Sci. USA* **110(40)**, E3820-E3829 (2013).
3. Kwon, K.W., Park, H., and Doh, J. Migration of T cells on surfaces containing complex nanotopography. *PLoS One* **8(9)**, e73960 (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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