

Catalog # 10-3346 CK-666

CAS# 442633-00-3 2-Fluoro-N-[2-methyl-1H-indol-3-yl)ethyl]benzamide Lot # S105140

A potent, selective and reversible inhibitor of ARP2/3 complex (actin related proteins 2 and 3) with an $IC_{50} = 4 \mu M$ for human ARP2/3.¹ Blocks actin nucleation and radically alters lamellipodial actin architecture, suspended cell shape and the cell spreading process.² CK-666 attenuates BBB dysfunction induced by methamphetamine³. It is an important new tool for studying actin assembly and the diverse range of actin-related processes in normal⁴ and pathophysiology⁵.

- 1) Nolan et al. (2009), Characterization of two classes of small molecule inhibitors of Arp2/3 complex; Nature, **460** 1031
- 2) Henson et al. (2015), Arp2/3 complex inhibition radically alters lamellipodial actin architecture, suspended cell shape, and the cell spreading process; Mol. Boil. Cell, **26** 887
- 3) Park et al. (2013), Methamphetamine-induced occluding endocytosis is mediated by the Arp2/3 complex-regulated actin rearrangement, J. Biol. Chem., **288** 33324
- 4) Sun et al. (2013), Actin nucleator Arp2/3 complex is essential for mouse preimplantation embryo development; Reprod. Fertil. Dev., **25** 617
- 5) Efremov et al. (2015), Distinct impact of targeted actin cytoskeleton reorganization on mechanical properties of normal and malignant cells; Biochim. Biophys. Acta,, **1853 (11PtB)** 3117

PHYSICAL DATA

Molecular Weight: 296.34
Molecular Formula: C₁₈H₁₇FN₂O
Purity: 98% by TLC

NMR: (Conforms)

Solubility: DMSO (up to 45 mg/ml) or Ethanol (up to 30 mg/ml)

Physical Description: Cream-colored solid

Storage and Stability: Store as supplied desiccated at -20°C for up to 1 year from the date of purchase. Solutions in

DMSO or ethanol may be stored at -20°C for up to 3 months.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.