

## Catalog # 10-4766 MOMIPP

CAS# 1363421-46-8 trans-3-(5-Methoxy-2-methyl-1H-indol-3-yl)-1-(4-pyridinyl)-2-propen-1-one Lot # FBA4137

MOMIPP is an inducer of Methuosis, a novel form of nonapoptotic cell death.<sup>1</sup> Methuosis is characterized by fusion of macropinocytotic vesiscles into progressively larger vacuoles resulting in a decrease in metabolic activity and rupture of the cell membrane.<sup>2</sup> MOMIPP was able to effectively reduce the growth and viability of Temozolomide-resistant glioblastoma and doxorubicin-resistant breast cancer cells at low micromolar concentrations. MOMMIP has also been shown to disrupt vesicular trafficking at the lysosomal nexus resulting in impaired degradation of EGF and LDL receptors, defective processing of procathepsins and accumulation of autophagosomes.<sup>3</sup>

- 1) Robinson et al. (2012), Synthesis and Evaluation of Indole-Based Chalcones as Inducers of Methuosis, a Novel Type of Nonapoptotic Cell Death; J.Med.Chem. **55** 1940
- 2) Overmeyer et al. (2008), Active ras triggers death in glioblastoma cells through hyperstimulation of macropinocytosis; Mol. Cancer Res. **6** 965
- 3) Mbah et al. (2017), Disruption of endolysosomal trafficking pathways in glioma cells by methuosis-inducing indole-based chalcones; Cell Biol.Toxicol. **33** 263

## PHYSICAL DATA

Molecular Weight: 292.33

Molecular Formula: C<sub>18</sub>H<sub>16</sub>N<sub>2</sub>O<sub>2</sub>

Purity: >98% by TLC

NMR: (Conforms)

Solubility: DMSO (7 mg/mL)
Physical Description: Orange solid

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

DMSO 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.