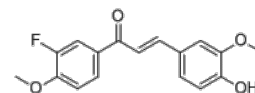


Product Name : JC2-11
Cat. No. : PC-20225
CAS No. : 937820-89-8
Molecular Formula : C₁₇H₁₅FO₄
Molecular Weight : 302.30
Target : NOD-like Receptor (NLR)
Solubility : 10 mM in DMSO



Biological Activity

JC2-11 is an anti-**inflammasome** compound and a pan-inhibitor of the NLRP3, NLRC4, and AIM2 inflammasomes. JC2-11 inhibits NLRP3 inflammasome activation in priming murine bone marrow-derived macrophages (BMDMs), attenuates the secretion of the cleaved caspase-1 (p20) and the release of IL-1 β from the NG or MSU-treated cells. JC2-11 attenuates NLRC4 and AIM2 inflammasome activation.

JC2-11 attenuates IL-1 β and LDH secretion elicited by ATP, flagellin, and dsDNA in BMDMs.

JC2-11 significantly inhibits the release of caspase-1 (p20) and IL-1 β from the LPS transfected cells, inhibits IL-1 β secretion in cells and mice.

JC2-11 inhibits the inflammasome activation in PMA-treated THP-1 cells.

JC2-11 inhibits the inflammasome activation by disrupting mitochondrial ROS production and caspase-1 activity.

JC2-11 regulates the inflammasome activation by inhibiting several intracellular signals, such as the priming step, mitochondrial ROS production, and caspase-1 activity.

References

Lee G, et al. *Sci Rep.* 2022 Dec 28;12(1):22484.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

E-mail: tech@probechem.com