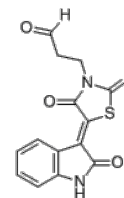


Product Name : ASC inhibitor MM01
Cat. No. : PC-72648
CAS No. :
Molecular Formula : C₁₄H₁₀N₂O₃S₂
Molecular Weight : 318.37
Target : Other Targets
Solubility : 10 mM in DMSO



Biological Activity

ASC inhibitor MM01 (MM01) is a first-in-class, specific small-molecule inhibitor of **ASC protein** that interferes with ASC speck formation, inhibited ASC-mediated pro-Casp-1 activation with IC₅₀ of 0.5 uM.

MM01 does not target the active site of caspase-1.

MM01 (10 uM) inhibits ASC oligomerization/speck formation and facilitates ASC degradation in HEK293 cells.

MM01 inhibits ASC-dependent inflammasome activity, inhibits **NLRP3**-dependent inflammasome activity in vitro.

MM01 inhibits ASC-dependent inflammasome activity in stimulated murine peritoneal macrophages and in MSU-induced peritonitis mouse model.

MM01 (10mg/kg) efficiently suppressed MSU-induced IL-1 β production and peritoneal neutrophil recruitment, with no effect on IL-6 and TNF- α secretion in murine mono-sodium urate (MSU)-induced model of peritonitis.

ASC (apoptosis-associated speck-like protein containing a caspase recruitment domain (CARD)) is a protein of the innate immune system that participates in the formation of inflammasomes, which are macromolecular complexes responsible for the maturation and release of pro-inflammatory cytokines.

References

Soriano-Teruel PM, et al. *Cell Death Dis.* 2021 Dec 13;12(12):1155.

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

E-mail: tech@probechem.com