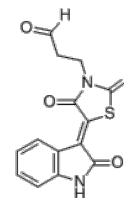


**Product Name** : ASC inhibitor MM01  
**Cat. No.** : PC-72648  
**CAS No.** :  
**Molecular Formula** : C<sub>14</sub>H<sub>10</sub>N<sub>2</sub>O<sub>3</sub>S<sub>2</sub>  
**Molecular Weight** : 318.37  
**Target** : Other Targets  
**Solubility** : 10 mM in DMSO



## 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 IC<sub>50</sub> 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-1β 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!**

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