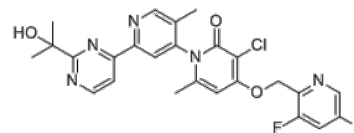


**Product Name** : ATI-450  
**Cat. No.** : PC-35136  
**CAS No.** : 1640282-42-3  
**Molecular Formula** : C<sub>25</sub>H<sub>22</sub>ClF<sub>2</sub>N<sub>5</sub>O<sub>3</sub>  
**Molecular Weight** : 513.93  
**Target** : MAPKAPK2 (MK2)  
**Solubility** : 10 mM in DMSO



## Biological Activity

Zunsemetinib (ATI-450, CDD-450) is a unique inhibitor that selectively blocks **p38 $\alpha$**  activation of proinflammatory kinase MAPK-**MK2** (MAPKAPK2, MK2) while sparing p38 $\alpha$  activation of PRAK and ATF2.

Zunsemetinib (ATI-450) is an orally bioavailable small molecule inhibitor of mitogen-activated protein kinase-activated protein kinase 2 (MAPKAPK2, MK2) pathway.

Zunsemetinib (ATI-450, CDD-450) shows no effect on NLRP3 expression, but decreases IL-1 $\beta$  expression by promoting IL-1 $\beta$  mRNA degradation.

Zunsemetinib (ATI-450, CDD-450) accelerates TNF- $\alpha$  and IL-6 mRNA decay, inhibites inflammation in mice with cryopyrinopathy, and is as efficacious as global p38 $\alpha$  inhibitors in attenuating arthritis in rats and cytokine expression by cells from patients with cryopyrinopathy and rheumatoid arthritis.

## References

Wang C, et al. *J Exp Med.* 2018 May 7;215(5):1315-1325.

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

E-mail: tech@probechem.com