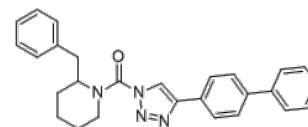


**Product Name** : KT-109  
**Cat. No.** : PC-61838  
**CAS No.** : 1402612-55-8  
**Molecular Formula** : C<sub>27</sub>H<sub>26</sub>N<sub>4</sub>O  
**Molecular Weight** : 422.5  
**Target** : Diacylglycerol Lipase (DAGL)  
**Solubility** : 10 mM in DMSO



## Biological Activity

KT-109 (KT109) is a potent, selective inhibitor of **DAGL $\beta$**  with IC<sub>50</sub> of 42 nM, displays about 60-fold selectivity over DAGL $\alpha$ . KT-109 shows negligible activity against other key enzymes involved in endocannabinoid signaling, including FAAH, MAGL and ABHD11.

KT-109 disrupts the lipid network involved in macrophage inflammatory responses, lowering 2-AG, as well as arachidonic acid and eicosanoids in mouse peritoneal macrophages.

KT-109 reverses nociceptive behaviour in mouse models of inflammatory and neuropathic pain; possesses one remaining off-target ABHD6 (IC<sub>50</sub>=16 nM).

## References

Hsu KL, et al. *Nat Chem Biol*. 2012 Dec;8(12):999-1007.

Wilkerson JL, et al. *Br J Pharmacol*. 2016 May;173(10):1678-92.

Shin M, et al. *Mol Pharm*. 2017 Sep 13. doi: 10.1021/acs.molpharmaceut.7b00657.

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

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