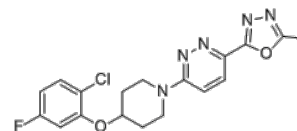


**Product Name** : CAY10566  
**Cat. No.** : PC-20383  
**CAS No.** : 944808-88-2  
**Molecular Formula** : C<sub>18</sub>H<sub>17</sub>ClFN<sub>5</sub>O<sub>2</sub>  
**Molecular Weight** : 389.82  
**Target** : Stearoyl-CoA Desaturase (SCD)  
**Solubility** : 10 mM in DMSO



## Biological Activity

CAY10566 is a potent, selective and orally bioavailable **stearoyl-CoA desaturase 1** (SCD1) inhibitor with IC<sub>50</sub> of 4.5 and 26 nM for mouse and human SCD1, respectively.

CAY10566 shows minimal activity against 75 different receptors, transporters, and ion channels in Cerep HTP screen.

CAY10566 showed a dose-dependent inhibition of SCD1-mediated conversion of saturated LCFA-CoAs to monounsaturated LCFA-CoAs in HepG2 cells (IC<sub>50</sub>, 7.9 nM as measured by C17:1/C17:0, or 6.8 nM as measured by [13C]-C16:1/[13C]-C16:0).

CAY10566 induced ATF4 mRNA, phosphorylated ATF4 protein, and total ATF4 protein in vascular smooth muscle cells (VSMC).

CAY10566 decreases CHIKV genome replication.

## References

Liu G, et al. *J Med Chem.* 2007 Jun 28;50(13):3086-100.

Masuda M, et al. *J Lipid Res.* 2012 Aug;53(8):1543-52.

Bakhache W, et al. *Antiviral Res.* 2019 Dec;172:104642.

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

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