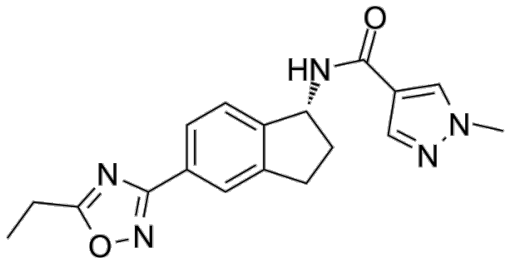
Product Data Sheet

Product Name: Aficamten
Cat. No.: GC63519

Chemical Properties

Cas. No.	2364554-48-1		
Formula	$C_{18}H_{19}N_5O_2$	M.Wt	337.38
Solubility	DMSO : 125 mg/mL (370.50 mM; Need ultrasonic)	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure			



Background

Aficamten (CK-274) is a potent cardiac myosin inhibitor with an IC50 of 1.4 μM. Aficamten can be

used for the research of hypertrophic cardiomyopathy (HCM)[1].

Aficamten is a next-generation cardiac myosin inhibitor that provides a projected human half-life appropriate for once a day dosing, reaching steady state within two weeks, and demonstrates a wide therapeutic window in vivo with a clear PK/PD relationship[1]. Aficamten exhibits moderate oral bioavailability (mouse 98%, rat 55%, rat 58%,rat 79%, dog 45%, monkey 41%) following oral administration (mouse 1 mg/kg, rat 2 mg/kg, rat 3 mg/kg, rat 8 mg/kg, dog 1 mg/kg and monkey 1 mg/kg)[1].Aficamten exhibits terminal elimination half-lives (mouse 4.5 h, rat 3.0 h, dog 33.8 h and, monkey 8.1 h) following intravenous administration (mouse 0.5 mg/kg, rat 1 mg/kg, dog 1 mg/kg and monkey 1.0 mg/kg)[1].

[1]. Chihyuan Chuang, et al. Discovery of Aficamten (CK-274), a Next-Generation Cardiac Myosin Inhibitor for the Treatment of Hypertrophic Cardiomyopathy. J Med Chem. 2021 Oct 14;64(19):14142-14152.