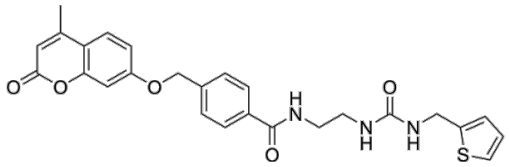
Product Data Sheet

Product Name: MyoMed 205
Cat. No.: GC74055

Chemical Properties

Cas. No.	2614161-13-4		
Formula	$C_{26}H_{25}N_3O_5S$	M.Wt	491.56
Solubility	DMSO : 25 mg/mL (50.86 mM; ultrasonic and warming and heat to 60°C)	Storage	-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

MyoMed-205 is an inhibitor targeting the activity of MuRF1. MyoMed-205 prevents early diaphragmatic systolic dysfunction and atrop due to unilateral diaphragmatic nerve denervation 12 hours later. MyoMed-205 reduces ubiquitination and subsequent proteasomal degradation of muscle proteins by inhibiting MuRF1 activity. MyoMed-205 increases levels of a protein that phosphorylates Akt (ser473), an important signaling molecule for muscle growth and maintenance. MyoMed-205 can be used to study and treat diaphragmatic dysfunction and atrop (DIDD) caused by early apraxia,

especially in clinical situations such as diaphragmatic paralysis or mechanical ventilation.

References:

[1]. Ribeiro F, et al. Small-Molecule Inhibition of MuRF1 Prevents Early Disuse-Induced Diaphragmatic Dysfunction and Atrop[J]. International Journal of Molecular Sciences, 2023, 24(4): 3637.