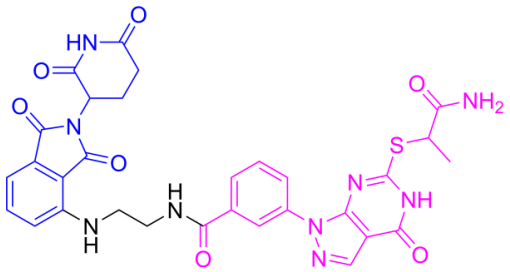
Product Data Sheet

Product Name: PROTAC DAPK1 Degrader-1
Cat. No.: GC80881

Chemical Properties

Cas. No.	3063030-38-3		
Formula	$C_{30}H_{27}N_9O_7S$	M.Wt	657.66
Solubility	DMSO: 4.17 mg/mL (6.34 mM; Need ultrasonic)	Storage	Store at 4°C, protect from light
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

PROTAC DAPK1 Degrader-1 is a death-associated protein kinase 1 (DAPK1) degrader with a DC_{50}

of 119.6 nM. PROTAC DAPK1 Degrader-1 significantly increases MDM2 protein levels and inhibits neuronal apoptosis in ceramide-induced cells. PROTAC DAPK1 Degrader-1 can be used to study neurological disorders such as cerebral ischemia and traumatic brain injury [1]. (Pink: DAPK ligand; Blue: Cereblon ligand; Black: linker).

In Vitro, PROTAC DAPK1 Degrader-1 (CP1) (0.1-10 μM; 2-24 h) induces time- and dose-dependent degradation of DAPK1 in SH-SY5Y cells, with a DC_{50} of 119.6 nM[1]. PROTAC DAPK1 Degrader-1 mediates the degradation of DAPK1 in SH-SY5Y cells via the proteasomal pathway without altering the expression of DAPK1 mRNA; it exhibits no cytotoxicity against SH-SY5Y cells[1]. PROTAC DAPK1 Degrader-1 (3-10 μM) upregulates the MDM2 protein level in SH-SY5Y cells, with a significant upregulation at the concentration of 10 μM, which results from the abrogation of the inhibitory effect of DAPK1 on MDM2 stability[1]. PROTAC DAPK1 Degrader-1 inhibits ceramide-induced apoptosis in SH-SY5Y cells and exhibits neuroprotective effects[1].

References:
[1]. Wu X, et al. Design, synthesis, and biological evaluation of death-associated protein kinase 1 PROTACs. Bioorganic chemistry. 2025 Oct;165:109044.