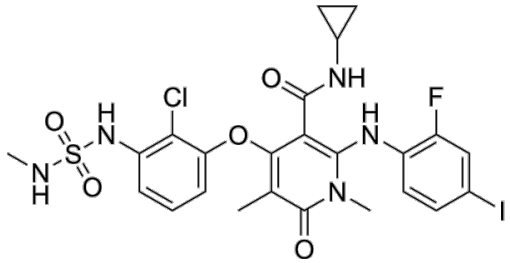
Product Data Sheet

Product Name: IK-595
Cat. No.: GC79482

Chemical Properties

Cas. No.	3018909-73-1		
Formula	$C_{24}H_{24}ClFIN_5O_5S$	M.Wt	675.9
Solubility	DMSO: 100 mg/mL (147.95 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

IK-595 is a MEK1/MEK2 inhibitor with high affinity (7.39 nM).IK-595 blocks EGF-induced ERK1/2 phosphorylation in AsPC-1 cells with IC_{50} value of 0.1 nM. IK-595 has oral activity and blood-brain barrier penetration. IK-595 can be used for the research of Ras/MAPK pathway-altered cancers [1].

In Vivo, IK-595 (6 mg/kg; p.o.; QOD) exhibits antitumor efficacy in xenograft mice [1]. IK-595 (6 mg/kg; p.o.; single dose) exhibits superior brain pharmacodynamic activity in A549 intracranial and

subcutaneous tumor-bearing mice[1].

In Vitro, IK-595 (3 nM; 4 h) increases MEK-CRAF interaction in HCT-116 cells and promotes MEK interactions with BRAFV600E, class II, and class III mutants in HT-29, NCI-H1755, and NCI-H1666 cells [1]. IK-595 (25 nM; long-term monitoring) in combination with sotorasib (62.5 nM) maintains cell viability inhibition for over 30 days in NCI-H358 cells[1]. IK-595 (3 nM; 120 h) combined with sotorasib (1000 nM) induces more apoptosis in NCI-H358 cells than other MEK inhibitor combinations. IK-595 (10 nM; 120 h) in combination with RMC-7977 (1 nM) increases apoptosis in NCI-H358 cells[1]. IK-595 (3 nM; long-term monitoring) in combination with sotorasib (250 nM) blocks growth of sotorasib-resistant NCI-H358-R cells. IK-595 inhibits ERK1/2 phosphorylation in sotorasib-resistant NCI-H358-R cells[1].

References:
[1]. Haines E, et al. The MEK-RAF molecular glue IK-595 has potent antitumor activity across RAS/MAPK pathway-altered cancers. Nat Cancer. 2026;7(1):116-130.