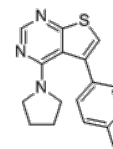


Product Name : UMK57
Cat. No. : PC-73363
CAS No. : 342595-74-8
Molecular Formula : C₁₇H₁₇N₃S
Molecular Weight : 295.404
Target : Kinesin
Solubility : 10 mM in DMSO



Biological Activity

UMK57 (UMK 57) is a small-molecule **MACK (alias KIF2C)** agonist that specifically potentiates the activity of the kinesin-13 protein MCAK, suppresses chromosome mis-segregation in chromosomal instability (CIN) cancer cells.

UMK57 targets MCAK in vivo but does not alter its levels or localization in cells.

UMK57 reduces lagging chromosome rates in human cancer cell lines by destabilizing kinetochore-microtubule (k-MT) attachments in metaphase.

UMK57 causes chromosome mis-segregation rebounds in UMK57-treated cancer cells.

UMK57 rescues age-associated CIN and delays senescence.

UMK57 improves chromosome segregation fidelity in elderly cells, does not impact the mitotic fitness of younger cells.

References

Bernardo Orr, et al. **Cell Rep.** 2016 Nov 8;17(7):1755-1763.

Monika Barroso-Vilares, et al. **EMBO Rep.** 2020 May 6;21(5):e49248.

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

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