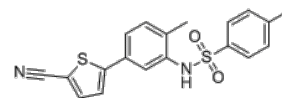


Product Name : ELR510444
Cat. No. : PC-49251
CAS No. : 1233948-35-0
Molecular Formula : C₁₉H₁₆N₂O₂S₂
Molecular Weight : 368.469
Target : Microtubule/Tubulin
Solubility : 10 mM in DMSO



Biological Activity

ELR510444 (ELR-510444) is a small molecule microtubule disruptor that directly interacts with tubulin at the colchicine-binding site, shows potent microtubule-disrupting activity.

ELR510444 treatment causes a loss of cellular microtubules and the formation of aberrant mitotic spindles and leading to mitotic arrest and apoptosis of cancer cells.

ELR510444 potently inhibited cell proliferation with an IC₅₀ value of 30.9 nM in MDA-MB-231 cells, inhibited the rate and extent of purified tubulin assembly, and displaced colchicine from tubulin.

ELR510444 is not a substrate for the P-glycoprotein drug transporter and retains activity in βIII-tubulin-overexpressing cell lines.

ELR510444 also shows potent antitumor activity in the MDA-MB-231 xenograft model with at least a 2-fold therapeutic window.

ELR510444 (30 nM) rapidly alters endothelial cell shape, similar to the effect of the vascular disrupting agent combretastatin A4

References

Risinger AL, et al. J Pharmacol Exp Ther. 2011 Mar;336(3):652-60.

Carew JS, et al. PLoS One. 2012;7(1):e31120.

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

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