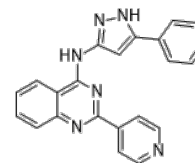


Product Name : UNI418
Cat. No. : PC-22798
CAS No. : 1802068-51-4
Molecular Formula : C₂₂H₁₆N₆
Molecular Weight : 364.41
Target : PIKfyve
Solubility : 10 mM in DMSO



CAS: 1802068-51-4

Biological Activity

UNI418 (UNI-418) is a potent, specific dual **PIKfyve** and **PIP5K1C** inhibitor with IC₅₀ of 60.7 nM/60.1 nM for PIP5K1B/PIP5K1C, K_d of 0.78 nM for PIKfyve (100% inhibition at 1 μM), inhibits UNI418 inhibits SARS-CoV-2 infection of Vero cells with IC₅₀ of 1.4 μM.

UNI418 inhibits autophagy, blocks autophagic flux by measuring the turnover rate of LC3-II in RPE1 cells, inhibits autophagosome-lysosome fusion and endolysosomal acidification.

UNI418 inhibits cathepsin maturation by preventing PIKfyve-dependent lysosomal trafficking, which is relevant to SARS-CoV-2 spike protein cleavage.

UNI418 efficiently inhibited SARS-CoV-2 replication in cells and reduced the production of progeny virus in culture supernatants.

UNI418 inhibits SARS-CoV-2 spike-mediated pseudovirus entry through PIP5K1C and PIKfyve.

References

Yuri Seo, et al. *Exp Mol Med*. 2024 Aug 1. doi: 10.1038/s12276-024-01283-2.

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

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