| Product Name | $: \mathrm{PQR} 309$ |  |
| :--- | :--- | :--- |
| Cat. No. | $: \mathrm{PC}-43268$ |  |
| CAS No. | $:$ | $1225037-39-7$ |
| Molecular Formula | $:$ | $\mathrm{C}_{17} \mathrm{H}_{20} \mathrm{~F}_{3} \mathrm{~N}_{7} \mathrm{O}_{2}$ |
| Molecular Weight | $: 411.3816$ |  |
| Target | : PI3K |  |
| Solubility | $: 10 \mathrm{mM}$ in DMSO |  |

## Biological Activity

PQR309 (Bimiralisib) is a potent, brain-penetrant, orally bioavailable, pan-class I PI3K/mTOR inhibitor with IC50 of 33, 451, 661, 708 and 89 nM for PI3K $\alpha$, PI3K, PI3K $\beta$, PI3K $\gamma$ and mTOR, respectively.
PQR309 (Bimiralisib) also shows potent activity against PI3K $\alpha$ E542K/E545K/H2047R mutants with IC50 of 63/136/36 nM, shows no significant activity for VPS34 and DNA-PK (IC50>8,000 nM).
PQR309 (Bimiralisib) inhibits cellular phosphorylation of PKB/Akt on Ser473 and ribosomal S6 on Ser235/236 in A2058 melanoma cells with IC50 of 139 and 205 nM , SKOV3 cell growth IC50 is 237 nM .
PQR309 (Bimiralisib) demonstrates efficiency in inhibiting proliferation in tumor cell lines and rat xenograft models.

## References

Beaufils F, et al. J Med Chem. 2017 Sep 14;60(17):7524-7538.
Tarantelli C, et al. Clin Cancer Res. 2018 Jan 1;24(1):120-129.

