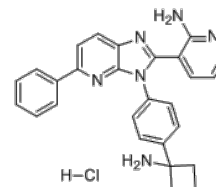


**Product Name** : Miransertib hydrochloride  
**Cat. No.** : PC-73208  
**CAS No.** : 1313883-00-9  
**Molecular Formula** : C<sub>27</sub>H<sub>25</sub>ClN<sub>6</sub>  
**Molecular Weight** : 468.99  
**Target** : Akt  
**Solubility** : 10 mM in DMSO



## Biological Activity

Miransertib (ARQ-092, MK-7075) is a potent, selective and allosteric **pan-Akt** inhibitor with IC<sub>50</sub> of 2.7 nM, 14 nM and 8.1 nM for Akt1, Akt2, Akt3, respectively.

Miransertib (ARQ-092) also potently inhibits AKT1-E17K mutant inhibitor and phosphorylation of AKT.

Miransertib (ARQ-092) inhibited AKT activation not only by dephosphorylating the membrane-associated active form, but also by preventing the inactive form from localizing into plasma membrane.

Miransertib (ARQ-092) exhibited strong anti-tumor activity in endometrial PDX models harboring mutant AKT1-E17K and other tumor models.

ARQ 092 enhanced tumor inhibition of a common chemotherapeutic agent (paclitaxel).

Miransertib (ARQ-092) inhibited proliferation across multiple tumor types but is most potent in leukemia, breast, endometrial, and colorectal cancer cell lines.

Miransertib (ARQ-092) was more prevalent in cancer cell lines containing PIK3CA/PIK3R1 mutations compared to those with wt-PIK3CA/PIK3R1 or PTEN mutations.

## References

Yu Y, et al. *PLoS One*. 2015 Oct 15;10(10):e0140479.

Lapierre JM, et al. *J Med Chem*. 2016 Jul 14;59(13):6455-69.

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

E-mail: tech@probechem.com