

## **Data Sheet**

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 Product Name
 :
 STA-9090

 Cat. No.
 :
 PC-20710

 CAS No.
 :
 888216-25-9

 Molecular Formula
 :
 C<sub>20</sub>H<sub>20</sub>N<sub>4</sub>O<sub>3</sub>

 Molecular Weight
 :
 364.41

Target : Heat Shock Protein (HSP) CAS: 888216-25-9

**Solubility** : 10 mM in DMSO



## **Biological Activity**

Ganetespib (STA 9090) is a potent, second generation small-molecule inhibitor of HSP90 (IC50=4 nM).

Ganetespib blocks the ability of HSP90 to bind to biotinylated geldanamycin and disrupts the association of HSP90 with its cochaperone, p23, more potently than 17-AAG.

Ganetespib causes depletion of receptor tyrosine kinases, extinguishing of downstream signaling, inhibition of proliferation and induction of apoptosis with IC50 of 2-30 nM, in NSCLC cell lines.

Ganetespib is also approximately 20-fold more potent than 17-AAG in isogenic Ba/F3 pro-B cells rendered IL-3 independent by expression of EGFR and ERBB2 mutants.

Ganetespib binds to the ATP-binding domain at the N-terminus of Hsp90 and acts as a potent Hsp90 inhibitor by inducing degradation of multiple oncogenic Hsp90 client proteins including HER2/neu, mutated EGFR, Akt, c-Kit, IGF-1R, PDGFR $\alpha$ , Jak1, Jak2, STAT3, STAT5, HIF-1 $\alpha$ , CDC2, c-Met, and Wilms' tumor 1.

## References

Lin TY, et al. *Exp Hematol.* 2008 Oct;36(10):1266-77.

McCleese JK, et al. *Int J Cancer*. 2009 Dec 15;125(12):2792-801.

Bansal H, et al. *Blood*. 2010 Nov 25;116(22):4591-9.

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

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