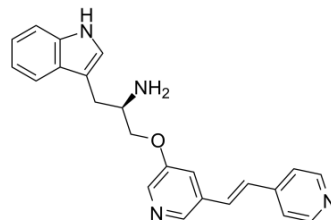


DB07107

Cat. No.:	HY-123390
CAS No.:	552332-71-5
Molecular Formula:	C ₂₃ H ₂₂ N ₄ O
Molecular Weight:	370.45
Target:	Bcr-Abl; Akt
Pathway:	Protein Tyrosine Kinase/RTK; PI3K/Akt/mTOR
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	DB07107 is a potent drug resistant T315I mutant Bcr-Abl tyrosine kinase inhibitor. DB07107 is also a potent Akt1 inhibitor with an IC ₅₀ value of 360 nM ^{[1][2]} .
IC₅₀ & Target	Akt1 360 nM (IC ₅₀)
In Vitro	DB07107 is more effective in blocking drug-resistant T315I mutant than the wild-type Bcr-Abl. DB07107 (C23H22N4O) from DrugBank showed the highest binding energy with XP score of -14.045 kcal/mol ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Banavath HN, et al. Identification of novel tyrosine kinase inhibitors for drug resistant T315I mutant BCR-ABL: a virtual screening and molecular dynamics simulations study. *Sci Rep.* 2014 Nov 10;4:6948.

[2]. Li Q, et al. Discovery of trans-3,4'-bispyridinylethylenes as potent and novel inhibitors of protein kinase B (PKB/Akt) for the treatment of cancer: Synthesis and biological evaluation. *Bioorg Med Chem Lett.* 2006 Mar 15;16(6):1679-85.

Caution: Product has not been fully validated for medical applications. For research use only.

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