

Data Sheet

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 Product Name
 :
 NSC 177223

 Cat. No.
 :
 PC-38489

 CAS No.
 :
 36707-00-3

 Molecular Formula
 :
 C₁₃H₁₅N₅O₆

 Molecular Weight
 :
 337.3

Target : Akt

Solubility : 10 mM in DMSO



Biological Activity

NSC 177227 (API-1) is a selective small molecule **Akt/protein kinase B** inhibitor, efficiently reduces the S473 phosphorylation levels of Akt with IC50 of 0.8 uM, binds to Akt PH domain and inhibits Akt membrane translocation. NSC 177227 (API-1) does not interfere with PI3K, PDK1, and mTORC1/2 complexes.

NSC 177227 (API-1) is selective for Akt over the AGC kinase members PKA, PKC, and SGK and other signaling molecules ERK, JNK, p38, and STAT3.

NSC 177227 (API-1) inhibits constitutively active Akt and its downstream targets, inhibits cell growth and induces apoptosis in the cells with hyperactivated Akt.

NSC 177227 (API-1) exhibits anti-tumor activity in cancer cell lines with hyperactivated Akt in mouse xenografts.

References

Donghwa Kim, et al. *J Biol Chem*. 2010 Mar 12;285(11):8383-94.

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

E-mail: tech@probechem.com