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Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	NAC1 inhibitor NIC3
Cat. No.	:	PC-23404
CAS No.	:	494830-67-0
Molecular Formula	:	C ₂₆ H ₃₆ N ₂ O ₄
Molecular Weight	:	440.58
Target	:	Other Targets
Solubility	:	10 mM in DMSO

`H^ ___K

CAS: 494830-67-0

Biological Activity

NAC1 inhibitor NIC3 is a specific small molecule inhibitor of oncogenic nucleus accumbens-associated protein-1 (NAC1), inhibits NAC1 homodimerization, leading to proteasomal NAC1 degradation.

NIC3 binds to the conserved Leu-90 of NAC1 and prevents its homodimerization.

NIC3 accelerates the proteasomal degradation of NAC1 protein.

NIC3 significantly sensitizes drug-resistant tumor cells to cisplatin and Adriamycin in vitro and in vivo.

NIC3 significantly strengthens the therapeutic efficacy of bevacizumab in a metastatic breast cancer mouse model.

NIC3 is able to sensitize mice-bearing NAC1-expressing ovarian tumors to anti-PD-1 therapy.

References

Wang X, et al. J Biol Chem. 2019 Jun 21;294(25):10006-10017.

Dong S, et al. Cancer Immunol Res. 2024 Nov 12. doi: 10.1158/2326-6066.CIR-24-0084.

Caution: Product has not been fully validated for medical applications. Lab Use Only! E-mail: tech@probechem.com