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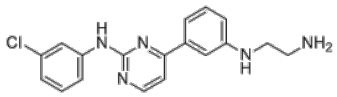
Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	AS105
Cat. No.	:	PC-72972
CAS No.	:	1026029-18-4
Molecular Formula	:	$C_{18}H_{18}ClN_5$
Molecular Weight	:	339.827
Target	:	CaMK
Solubility	:	10 mM in DMSO (3.4 mg/mL)



Biological Activity

AS105 (AS-105) is a highly potent, ATP-competitive **CaMKII** inhibitor, inhibits CaMKIIδ with IC50 of 8 nM, Ki of 3 nM.
AS105 is also effective against autophosphorylated CaMKII (in contrast to the commonly used allosteric CaMKII-inhibitor KN-93).
In isolated atrial cardiomyocytes from human donors and ventricular myocytes from CaMKIIδC-overexpressing mice with heart failure, AS105 effectively reduced diastolic SR Ca2+ leak by 38% to 65% as measured by Ca2+-sparks or tetracaine-sensitive shift in [Ca2+]i.
AS105 effectively reduced SR Ca2+-leak, thus improving SR Ca2+-accumulation and reducing cellular arrhythmogenic correlates, without negatively influencing excitation-contraction coupling.

References

Stefan Neef, et al. ***J Mol Cell Cardiol.*** 2018 Feb;115:73-81.

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

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