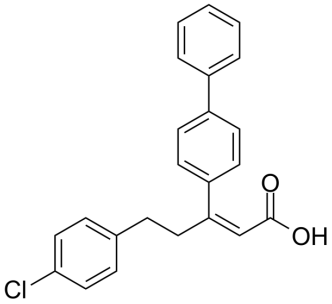
PS315

Cat. No.:	HY-124308
CAS No.:	1221964-50-6
Molecular Formula:	$C_{23}H_{19}ClO_2$
Molecular Weight:	362.85
Target:	PKC
Pathway:	Epigenetics; TGF-beta/Smad
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	PS315, a derivative of PS48 (HY-15967), is an allosteric PKC inhibitor by binding to the PIF-pocket of aPKC and inducing a displacement of the active site residue Lys111. PS315 inhibits the full-length and catalytic domain constructs of PKC_ζ (IC_{50} =10 μM) and PKC_η (IC_{50}=30 μM). PS315 has anti-cancer activity[1].	
IC_{50} & Target	PKCζ 10 μM (IC_{50})	PKCη 30 μM (IC_{50})
In Vitro	Preincubation of U937 cells with 5 μM PS315 inhibits TNF-α induced NF-κB activation by 74%, whereas complete inhibition is observed with 10 μM PS315[1]. The small allosteric inhibitor PS315 and the N-terminal region of aPKC both act directly on the PIF-pocket on-off switch. PS315, binding at the PIF-pocket, induces a displacement of the active site residue Lys111, thereby inhibiting the activity of aPKCs by allosterically affecting the catalytic mechanism of the kinase[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.	

REFERENCES

[1]. Zhang H, et al. Molecular mechanism of regulation of the atypical protein kinase C by N-terminal domains and an allosteric small compound. Chem Biol. 2014 Jun 19;21(6):754-65.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA