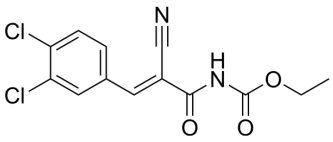
FSC231

Cat. No.:	HY-117772
CAS No.:	1215849-96-9
Molecular Formula:	$C_{13}H_{10}Cl_2N_2O_3$
Molecular Weight:	313.14
Target:	Others
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	FSC231 is a PSD‑95/DLG/ZO‑1 (PDZ) domain inhibitor of PICK1. FSC231 has analgesic effects[1].
IC_{50} & Target	PICK1[1].
In Vitro	FSC231 (50 μM) blocks binding between GluR2 and PICK1 in COS7 cells[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	FSC231 (78.40 μg/kg in total, daily, seven times, i.p., 3 h before Paclitaxel) alleviates the Paclitaxel (HY-B0015)‑induced neuralgia of rats[1]. FSC231 (39.2μg/kg/day, i.p., for 4 weeks) inhibits the development of diabetic cardiomyopathy in rats by inhibiting ROS generation and apoptosis partly via PICK1/eNOS/cGMP pathway[3]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Paclitaxel (HY-B0015)‑induced neuralgia of rats[1]
Dosage:	78.40 μg/kg in total
Administration:	i.p., daily, seven times, completed at 3 h before Paclitaxel
Result:	Reversed the changes of inflammatory cytokines (IL‑6, TNF‑α and IL‑10). Inhibited the phosphorylation levels of GSK‑3β and ERK1/2.

REFERENCES

[1]. Zhang X, et al. FSC231 alleviates paclitaxel-induced neuralgia by inhibiting the interactions between PICK1 and GluA2 and activates GSK-3β and ERK1/2. Brain Behav. 2021 Nov;11(11):e2380.

[2]. Thorsen TS, et al. Identification of a small-molecule inhibitor of the PICK1 PDZ domain that inhibits hippocampal LTP and LTD. Proc Natl Acad Sci U S A. 2010 Jan 5;107(1):413-8.

[3]. Cai Fei, et al. GW27-e1146 PICK1 inhibition restores myocardial injury by suppressing reactive oxygen species generation and apoptosis in diabetic rats. J Am Coll Cardiol. 2016 Oct, 68 (16_Supplement) C67.

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

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