Product Data Sheet

JH-131e-153

Cat. No.:HY-149489CAS No.:742104-91-2Molecular Formula: $C_{22}H_{38}O_5$ Molecular Weight:382.53Target:Others

Pathway: Others

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

HO

BIOLOGICAL ACTIVITY

Description	JH-131e-153, a diacylglycerol (DAG)-lactone, is a small molecule activator of Munc13-1, targeting the C1 domain. The activation sequence of JH-131e-153 on Munc13-1 is WT>1590≈R592A≈W588A. The C1 domain of Munc13-1 and protein kinase C (PKC) are homologous in sequence and structure. The activation sequence of JH-131e-153 on Munc13-1 and PKC was PKC α>Munc13-1>PKCε. JH-131e-153 regulates neuronal processes through Munc13-1 and can be further used in the study of neurodegenerative diseases ^[1] .
IC ₅₀ & Target	$Munc13\text{-}1C1domain^{[1]}$
In Vitro	Munc13-1 is a target of the diacylglycerol second messenger pathway and plays a role in vesicle maturation during exocytosis. Participates in neurotransmitter release by acting on synaptic vesicle initiation prior to vesicle fusion, and participates in activity-dependent refilling of the easy-release vesicle pool (RRP). MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Das J, et al. Activation of Munc13-1 by Diacylglycerol (DAG)-Lactones. Biochemistry. 2023 Aug 31.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

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