

Product Data Sheet

Inhibitors

Screening Libraries

N-Palmitoyl dopamine

Cat. No.: HY-108455 CAS No.: 136181-87-8 Molecular Formula: $C_{24}H_{41}NO_3$

Molecular Weight: 391.59

Target: Others Pathway: Others

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

BIOLOGICAL ACTIVITY

Description	N-Palmitoyl dopamine (PALDA) is a endogenous, long-chain, linear fatty acid dopamide, which is inactive on TRPV1. N-Palmitoyl dopamine displays 'entourage' effects on endovanilloids N-arachidonoyl-dopamine (NADA) and anandamide ^[1] .
In Vitro	PALDA (0.1-10 μ M), the EC ₅₀ of N-arachidonoyl-dopamine (NADA) is lowered from approximately 90 to approximately 30 nM. The effect on intracellular Ca ²⁺ by another endovanilloid, N-arachidonoyl-ethanolamine (anandamide, 50 nM), is also enhanced dose-dependently by PALDA. PALDA also acted in synergy with low pH (6.0-6.7) to enhance intracellular Ca ²⁺ via TRPV1 ^[1] .
	MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Luciano De Petrocellis, et al. Actions of two naturally occurring saturated N-acyldopamines on transient receptor potential vanilloid 1 (TRPV1) channels. Br J Pharmacol. 2004 Sep;143(2):251-6.

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