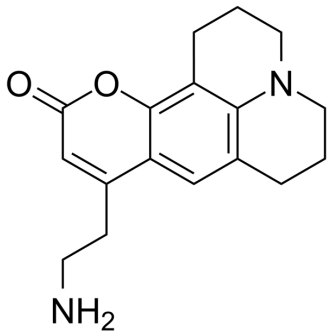
FFN511

Cat. No.:	HY-103465
CAS No.:	1004548-96-2
Molecular Formula:	$C_{17}H_{20}N_2O_2$
Molecular Weight:	284.35
Target:	Monoamine Transporter
Pathway:	Membrane Transporter/Ion Channel
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	FFN511 is a potent fluorescent false neurotransmitters (FFNs) that targets neuronal vesicular monoamine transporter 2 (VMAT2). FFN511 inhibits serotonin binding to VMAT2-containing membranes with an IC_{50} of 1 μM. FFN511 directly images the dynamics of release during exocytosis, can be used to label dopamine terminals in live cortical-striatalacute slices[1][2].
In Vitro	FFN511 (350 nM; 30 min) accumulats in a pattern consistent with LDCVs in cultured mouse chromaffin cells, and the accumulation is abolished by the lipophilic base chloroquine[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only. Cell Viability Assay[1]

Cell Line:	mouse chromaffin cells
Concentration:	350 nM
Incubation Time:	30 min
Result:	Accumulated in cultured mouse chromaffin cells (the same as LDCVs), and the accumulation could be abolished by the lipophilic base chloroquine, which collapses the vesicle pH gradient.

REFERENCES

[1]. Gubernator NG, et al. Fluorescent false neurotransmitters visualize dopamine release from individual presynaptic terminals. Science. 2009 Jun 12;324(5933):1441-4.

[2]. Keighron JD, et al. Analytical tools to monitor exocytosis: a focus on new fluorescent probes and methods. Analyst. 2012 Apr 21;137(8):1755-63.

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

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