abcam

Product datasheet

FFN102 (Mini 102), Fluorescent DAT and VMAT2 substrate ab120866

3 References 5 图像

概述

产品名称 FFN102 (Mini 102), Fluorescent DAT and VMAT2底物

描述 Novel pH responsive FFN. Measures localization and activity of dopaminergic presynaptic

terminals.

生物学描述 Novel, pH responsive fluorescent false neurotransmitter (FFN). Rodent DAT and VMAT2

substrate. Enables two-photon microscopic imaging of localization and activity of dopaminergic presynaptic terminals in the striatum of mouse acute brain slice. More selective for dopaminergic

synapses than FFN511 (ab120331).

Exhibits greater fluorescence emission in neutral than acidic environments allowing optical

measurement of synaptic vesicle content release.

Sufficiently bright, photostable and suitable for two-photon fluorescence microscopy and standard

fluorescent microscopy. Compatible with GFP tags.

纯度 > 98%

CAS编号 1234064-11-9

化学结构

CI .CF₃CO₂H

性能

化学名称 4-(2-Aminoethyl)-6-chloro-7-hydroxy-2*H*-1-benzopyran-2-one 2,2,2-trifluoroacetate

分子量 353.68

分子式 $C_{11}H_{10}CINO_3.CF_3CO_2H$

PubChem识别号 91885430

存放说明 Store at +4°C. Store under desiccating conditions. The product can be stored for up to 12

months.

溶解度概述 Soluble in water to 50 mM

处理 Wherever possible, you should prepare and use solutions on the same day. However, if you need

to make up stock solutions in advance, we recommend that you store the solution as aliquots in

tightly sealed vials at -20°C. Generally, these will be useable for up to one month. Before use, and prior to opening the vial we recommend that you allow your product to equilibrate to room temperature for at least 1 hour.

Need more advice on solubility, usage and handling? Please visit our <u>frequently asked</u> <u>questions (FAQ) page</u> for more details.

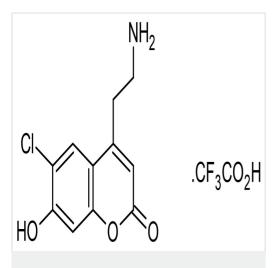
SMILES

 ${\tt C1=C(C2=CC(=C(C=C2OC1=O)O)CI)CCN.C(=O)(C(F)(F)F)O}$

Synthetic

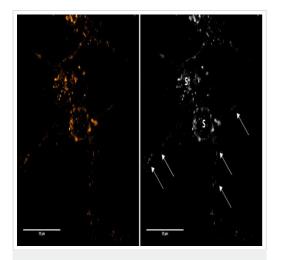
图片

来源



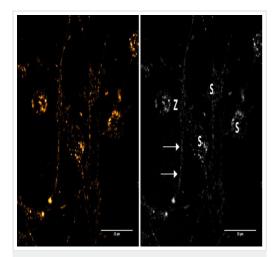
2D chemical structure image of ab120866, FFN102 (Mini 102), Fluorescent DAT and VMAT2 substrate

Chemical Structure - FFN102 (Mini 102), Fluorescent DAT and VMAT2 substrate (ab120866)



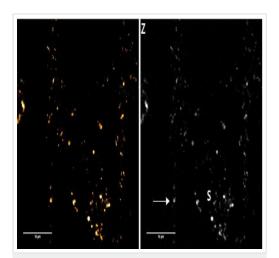
Fluorescent Cell Imaging - FFN102 (Mini 102), Fluorescent DAT and VMAT2 substrate (ab120866) All images provided by Thorsten Lau

Figure 1: Two neuronal cells stained with 50 μ M FFN102 on differentiation day 10. Shown is a sum projection of a confocal z-stack. Accumulation of FFN102 can be observed along the neurites (arrows) and the cell soma (S).



Fluorescent Cell Imaging - FFN102 (Mini 102), Fluorescent DAT and VMAT2 substrate (ab120866)

Figure 2a: Images in the first row show a group of neuronal cells stained with 50 μ M FFN102 (sum projection of a confocal stack). FFN102 localizes to structures on the cell soma (S) as well as neurites (arrows). Z indicates the area zoomed in for an additional z-stack.



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Figure 2b: Zoomed in area of "Z" from figure 2b. The arrow indicates a globular structure on a neurite. S indicates FFN102 positive structures on the cell soma.

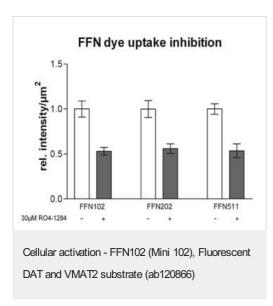


Figure 3: FFN102 dye uptake inhibition on addition of VMAT2 inhibitor RO4-1284

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES, NOT FOR USE IN HUMANS"

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