# abcam

## Product datasheet

# FFN511, Fluorescent substrate for VMAT2 ab120331

### **5 References** 1 Image

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**Product name** FFN511, Fluorescent substrate for VMAT2

**Description** First novel fluorescent false neurotransmitter. Enables optical imaging of presynaptic terminal

activity.

**Biological description** First novel fluorescent false neurotransmitter. Enables optical imaging of presynaptic terminal

activity.

Inhibits 5-HT binding to VMAT2 (IC $_{50}$  = 1  $\mu$ M (comparable to dopamine itself)). Released *via* exocytosis in the striatum in mouse acute slice preparation. Labels dopamine and other

presynaptic terminals in the striatum.

Compatible with GFP tags and other optical probes. Sufficiently bright, photostable and suitable

for two-photon fluorescence microscopy.

View the technique online

For highly selective labelling of dopaminergic presynaptic termainals FFN102 (ab120866) is

recommended.

**CAS Number** 1004548-96-2

**Chemical structure** 

#### **Properties**

**Chemical name** 9-(2-Aminoethyl)-2,3,6,7-tetrahydro-1*H*,5*H*,11*H*-[1]benzopyrano[6,7,8-*ij*]quinolizin-11-one

Molecular weight 284.36

Molecular formula  $C_{17}H_{20}N_2O_2$ 

PubChem identifier 23725121

Storage instructions Store at +4°C. Store under desiccating conditions. The product can be stored for up to 12

months.

**Solubility overview** Soluble in DMSO to 100 mM and in ethanol to 100 mM

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

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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.

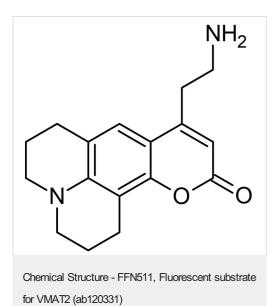
To make a 10  $\mu$ M solution for slice incubation, 25  $\mu$ l of a 20 mM FFN511 stock solution in DMSO is added to 50 ml of ACSF. This results in a 10  $\mu$ M FFN511 solution in ACSF containing 0.05% DMSO.

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

SMILES NCCC2=CC(=O)Oc1c3CCCN4CCCc(cc12)c34

**Source** Synthetic

#### **Images**



2D chemical structure image of ab120331, FFN511, Fluorescent substrate for VMAT2

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

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