

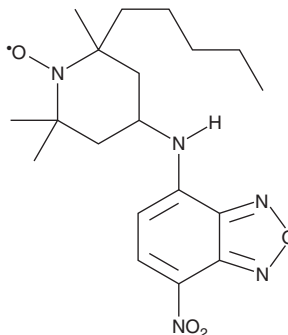
PRODUCT INFORMATION



NBD-Pen

Item No. 25806

CAS Registry No.: 1955505-54-0
Formal Name: 2,2,6-trimethyl-4-[(7-nitro-2,1,3-benzoxadiazol-4-yl)amino]-6-pentyl-1-piperidinyloxy
MF: C₁₉H₂₈N₅O₄
FW: 390.5
Purity: ≥95% (mixture of isomers)
Ex./Em. Max: 470/530 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

NBD-Pen is supplied as a solid. A stock solution may be made by dissolving the NBD-pen in the solvent of choice, which should be purged with an inert gas. NBD-Pen is soluble in methanol.

Description

NBD-Pen is a turn-on fluorescent probe for lipid radicals.¹ Upon reaction with lipid radicals, NBD-pen displays excitation/emission maxima of 470 and 530 nm, respectively. It is selective for lipid radicals over peroxide, oxygen, hypochlorite, and hydroxy radicals in cell-free assays. NBD-Pen has been used in the detection of lipid radicals in *in vitro* and *in vivo* models of hepatocellular carcinoma and oxidative disease.^{1,2}

References

1. Yamada, K., Mito, F., Matsuoka, Y., *et al.* Fluorescence probes to detect lipid-derived radicals. *Nat. Chem. Biol.* **12**(8), 608-613 (2016).
2. Ishida, Y., Okamoto, Y., Matsuoka, Y., *et al.* Detection and inhibition of lipid-derived radicals in low-density lipoprotein. *Free Radic. Biol. Med.* **113**, 487-493 (2017).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 02/16/2024

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM