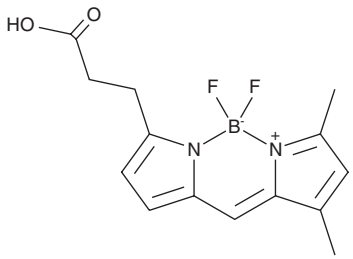
PRODUCT INFORMATION

BODIPY 503/512

Item No. 28800

CAS Registry No.:	165599-63-3
Formal Name:	(T-4)-[5-[(3,5-dimethyl-2H-pyrrol-2-ylidene-κN)methyl]-1H-pyrrole-2-propanoato(2-)-κN[1]]difluoro-borate(1-), monohydrogen
Synonyms:	BDP FL, 3-BODIPY-Propanoic Acid
MF:	$C_{14}H_{15}BF_2N_2O_2$
FW:	292.1
Purity:	≥95%
Ex./Em. Max:	503/512 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

BODIPY 503/512 is supplied as a solid. A stock solution may be made by dissolving the BODIPY 503/512 in the solvent of choice, which should be purged with an inert gas. BODIPY 503/512 is soluble in the organic solvent methanol.

Description

BODIPY 503/512 is a lipophilic, amine-reactive fluorescent probe.[1] It has been used to label oligonucleotide probes and primers for the quantitation of DNA and RNA by PCR and to monitor the uptake and trafficking of BODIPY-labeled proteins and other compounds within cells by fluorescence microscopy.[1-4] BODIPY 503/512 has also been used to identify and sort adipocytes from mouse white and brown adipose tissue by flow cytometry.[5] It displays excitation/emission maxima of 503/512 nm, respectively.[1]

References

1. Murakami, M., Cabral, H., Matsumoto, Y., *et al.* Improving drug potency and efficacy by nanocarrier-mediated subcellular targeting. *Sci. Transl. Med.* **3(64)**, 64ra2 (2011).
2. Kurata, S., Kanagawa, T., Yamada, K., *et al.* Fluorescent quenching-based quantitative detection of specific DNA/RNA using a BODIPY® FL-labeled probe or primer. *Nucleic Acids Res.* **29(6)**, E34 (2001).
3. Bittel, A.M., Saldivar, I.S., Dolman, N.J., *et al.* Superresolution microscopy with novel BODIPY-based fluorophores. *PLoS One* **13(10)**, e0206104 (2018).
4. Surewaard, B.G.J., Deniset, J.F., Zemp, F.J., *et al.* Identification and treatment of the *Staphylococcus aureus* reservoir in vivo. *J. Exp. Med.* **213(7)**, 1141-1151 (2016).
5. Hagberg, C.E., Li, Q., Kutschke, M., *et al.* Flow cytometry of mouse and human adipocytes for the analysis of browning and cellular heterogeneity. *Cell Rep.* **24(10)**, 2746-2756 (2018).

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