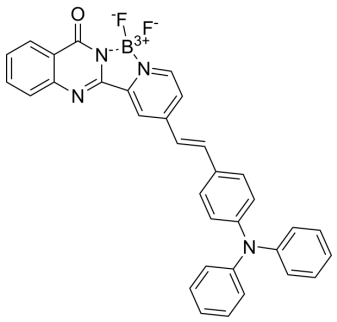
BODIQPy-TPA

Cat. No.:	HY-163286
CAS No.:	2738333-02-1
Molecular Formula:	$C_{33}H_{23}BF_2N_4O$
Molecular Weight:	540.37
Target:	Fluorescent Dye; Ferroptosis
Pathway:	Others; Apoptosis
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

BODIQPy-TPA is a lipophilic probes, which induces ferroptosis in B16 and HepG2 cells upon light irradiation through lipid peroxidation. BODIQPy-TPA reveals a maximum absorption wavelength of 488 nm and a maximum emission wavelength above 640 nm[1].

In Vitro

BODIQPy-TPA (5 μM) ferrostatin-dependently reveals photocytotoxicity with IC_{50} of 0.51 μM in B16 cells under blue LED irradiation, downregulates expression of ferritin heavy polypeptide 1 (FTH1) [1].

BODIQPy-TPA (5 μM) increases levels of triacylglycerol (TG) and downregulates phosphatidylcholine (PC) with light irradiation[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Viability Assay[1]

Cell Line:	B16
Concentration:	0-50 μM
Incubation Time:	48 h
Result:	Inhibited B16 cells viability, decreased the cytotoxicity with presence of ferrostatin.

Western Blot Analysis[1]

Cell Line:	B16
Concentration:	5 μM
Incubation Time:	48 h
Result:	Decreased levels of FTH1.

REFERENCES

[1]. Xing Z, et al., Endoplasmic Reticulum-Targeting Quinazolinone-Based Lipophilic Probe for Specific Photoinduced Ferroptosis and Its Induced Lipid Dynamic Regulation. J Med Chem. 2024 Feb 8;67(3):1900-1913.

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

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA