

PRODUCT INFORMATION

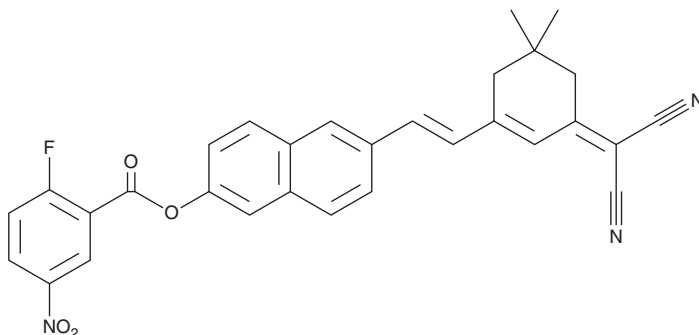


PSP

Item No. 35589

CAS Registry No.: 3030735-86-2
Formal Name: (E)-6-(2-(3-(dicyanomethylene)-5,5-dimethylcyclohex-1-en-1-yl)vinyl)naphthalen-2-yl 2-fluoro-5-nitrobenzoate

MF: C₃₀H₂₂FN₃O₄
FW: 507.5
Purity: ≥98%
UV/Vis.: λ_{max}: 220, 251, 406 nm
Supplied as: A crystalline 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

PSP is supplied as a crystalline solid. A stock solution may be made by dissolving the PSP in the solvent of choice, which should be purged with an inert gas. PSP is soluble in the organic solvent dimethyl formamide at a concentration of approximately 1 mg/ml.

Description

PSP is a two-photon fluorescent probe for hydrogen polysulfide (H₂S_n), a reactive sulfur species (RSS) formed during ferroptosis.¹ Upon reaction with H₂S_n, the 2-fluoro-5-nitro-benzoate quenching group of PSP is removed, resulting in the release of a near-infrared emitting product. PSP is selective for H₂S_n over a panel of reactive oxygen species (ROS), reactive nitrogen species (RNS), metal ions, and sulfur-containing ions. It has been used to detect H₂S_n in live cells and tumor spheroids *in vitro*.

Reference

1. Di, X., Ge, C., Liu, Y., *et al.* Monitoring hydrogen polysulfide during ferroptosis with a two-photon fluorescent probe. *Talanta* **232**, 122467 (2021).

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.

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