

PRODUCT INFORMATION

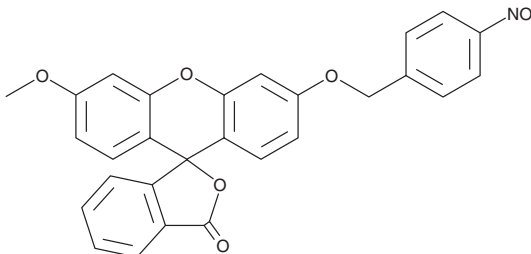


CAY10730

Item No. 26547

CAS Registry No.: 2206677-06-5
Formal Name: 3'-methoxy-6'-[(4-nitrophenyl) methoxy]-spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one

MF: C₂₈H₁₉NO₇
FW: 481.5
Purity: ≥98%
UV/Vis.: λ_{max}: 225, 275 nm
Ex./Em. Max: 454/520 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

CAY10730 is supplied as a crystalline solid. A stock solution may be made by dissolving the CAY10730 in the solvent of choice. CAY10730 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of CAY10730 in ethanol is approximately 1 mg/ml and approximately 20 mg/ml in DMSO and DMF.

Description

CAY10730 is a turn-on fluorescent probe for the detection of nitroreductase activity, a marker of hypoxia.¹ In the presence of nitroreductase, CAY10730 is transformed into a highly fluorescent molecule that displays excitation/emission maxima of 454/520 nm, respectively. It is selective for nitroreductase over a variety of bioanalytes, including glutathione, ascorbic acid, and reactive oxygen species such as H₂O₂. CAY10730 (1 μM) has been used to detect hypoxia in A549 human lung carcinoma cells.

Reference

1. More, K.N., Lim, T.-H., Kim, S.-Y., et al. Characteristics of new bioreductive fluorescent probes based on the xanthene fluorophore: Detection of nitroreductase and imaging of hypoxic cells. *Dyes Pigm.* **151**, 245-253 (2018).

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

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