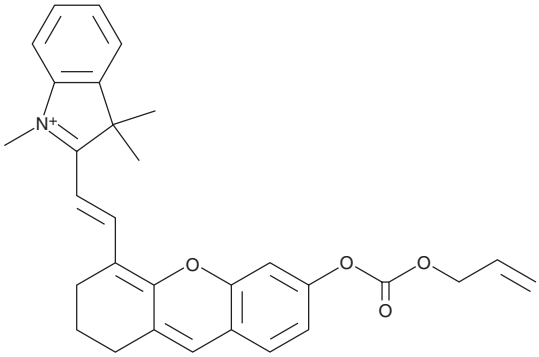
PRODUCT INFORMATION

CAY10737

Item No. 27026

CAS Registry No.:	2079118-42-4
Formal Name:	2-[2-[2,3-dihydro-6-[[(2-propen-1-yloxy) carbonyl]oxy]-1H-xanthen-4-yl]ethenyl]-1,3,3-trimethyl-3H-indolium
MF:	$C_{30}H_{30}NO_4$
FW:	468.6
Purity:	≥95%
UV/Vis.:	λ_{max}: 240, 306, 345, 589 nm
Abs./Em. Max:	678/714 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

CAY10737 is supplied as a crystalline solid. A stock solution may be made by dissolving the CAY10737 in the solvent of choice. CAY10737 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of CAY10737 in these solvents is approximately 30 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of CAY10737 can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of CAY10737 in PBS, pH 7.2, is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

CAY10737 is a turn-on fluorescent probe for the detection of carbon monoxide (CO).[1] It is selective for CO over a variety of anions, amino acids, amines, biothiols, and reactive species. In the presence of palladium (Pd) and CO, CAY10737 undergoes the Pd^0-mediated Tsuji-Trost reaction to release a fluorescent compound that has absorption and emission maxima of 678/714 nm, respectively. This fluorescence can be used to detect CO production *in vitro* and *in vivo*. CAY10737 has low cytotoxicity, decreasing viability of HeLa cells by less than 25% when used at a concentration of 50 µM with $PdCl_2$ for 24 hours.

Reference

1. Feng, W. and Feng, H. A readily available colorimetric and near-infrared fluorescent turn-on probe for detection of carbon monoxide in living cells and animals. *Sens. Actuators B Chem.* **255(Part 2)**, 2314-2320 (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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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