# **PRODUCT** INFORMATION



## CAY10455

Item No. 10005072

CAS Registry No.:	290374-09-3	$\sim 0 \sim 0 \sim 0 \sim$
Formal Name:	[3',6'-bis(acetyloxy)-3-	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
	oxospiro[isobenzofuran-1(3H),9'-	
	[9H]xanthen]-5-yl]-2-[[1-oxo-	$\sim$ $\times$ $\sim$
	5Z,8Z,11Z,14Z-eicosatetraenyl]	i i i i i i i i i i i i i i i i i i i
	amino]ethyl ester carbamic acid	
Synonym:	SKM 4-45-1	) o
MF:	C <sub>47</sub> H <sub>52</sub> N <sub>2</sub> O <sub>10</sub>	H <sup>N</sup> O <sub>N</sub> H
FW:	804.9	U Î
Purity:	≥98%	
UV/Vis.:	λ <sub>max</sub> : 226, 291 nm	
Supplied as:	A solution in methyl acetate	
Storage:	-20°C	
Stability:	≥2 years	

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

#### Laboratory Procedures

CAY10455 is supplied as a solution in methyl acetate. To change the solvent, simply evaporate the methyl acetate under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide purged with an inert gas can be used. The solubility of CAY10455 in these solvents is approximately 5 mg/ml.

CAY10455 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the methyl acetate solution of CAY10455 should be diluted with the aqueous buffer of choice. CAY10455 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

CAY10455 is a labeled analog of arachidonoyl ethanolamide (anandamide; AEA) that is non-fluorescent when outside the cell. Upon transport into the cell interior, it is cleaved by esterases to give a bright fluorescence at 530 nm.<sup>1</sup> CAY10455 uptake into C6 glioma cells is inhibited by AEA and its analogs, and conversely CAY10455 inhibits the uptake of tritiated AEA, indicating that they compete for the AEA transporter.<sup>1</sup>

#### References

1. Muthian, S., Nithipatikom, K., Campbell, W.B., et al. Synthesis and characterization of a fluorescent substrate for the N-arachidonoylethanolamine (anandamide) transmembrane carrier. J. Pharmacol. Exp. Ther. 293, 289-295 (2000).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFFTY 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.

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