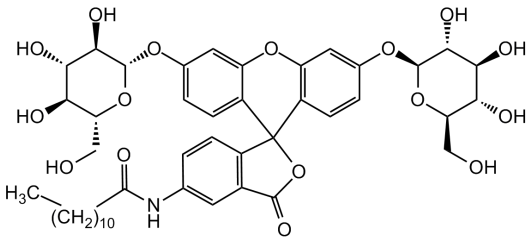
AdipoGen® LIFE SCIENCES

PRODUCT DATA SHEET

AG-CY1-0001 15-Mar-2017

5-Dodecanoylaminofluorescein Di-β-D-glucopyranoside

[C12-FDGlu]



AG-CY1-0001-M001	1 mg
AG-CY1-0001-M005	5 mg
Formula	$C_{44}H_{55}NO_{16}$
MW	853.9
CAS	149541-10-6

Handling / Storage

Shipping	BLUE ICE
Short Term Storage	+4°C
Long Term Storage	-20°C

Keep cool and dry. Protect from light.

Use / Stability

Stable for at least 2 years after receipt when stored at -20°C.

MSDS available at www.adipogen.com or upon request.

Product Specifications

Purity	≥98% (NMR)
Identity	Determined by ^{1}H-NMR.
Appearance	Light yellow powder.
Solubility	Soluble in DMSO or methanol. Slightly soluble in water.

Product Description

- Non-fluorescent reporter protein substrate. This fluorogenic β-glucosidase substrate releases the highly fluorescent dye 5-dodecanoylaminofluorescein (Spectral data: λex=490nm, λem=520nm) in direct correlation with enzyme activity. Can be used for analysis of cell viability.
- This fluorescent substrate is for measuring the presence and activity of a glycosidic enzyme inside a cell. The substrates can penetrate the cell membrane under physiological conditions and forms a non-toxic green fluorescent product that is well retained in viable cells and which allows sorting and cloning of the cells and monitoring of cell development *in vitro* and *in vivo*.
- The colorless and lipophilic substrate enters the cells by embedding in the outer layer of the cell membrane as a glycolipid and then transferring to the inner membrane by a 'flip-flop' mechanism. Once inside the cell,

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the substrate is cleaved by β-glucosidase, generating the green fluorescent enzymatic hydrolysis product 5-dodecanoylaminofluorescein, which is retained in the cell membrane because of its lipophilic hydrocarbon chain, and allowing histochemical, spectrophotometric and fluorometric measurements.

Product Specific References

1. Lipophilic fluorescent glycosidase substrates: R.P. Haugland, et al.; US5208148A (1993)

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