For Research Use Only

TokyoGreen®-βGlu

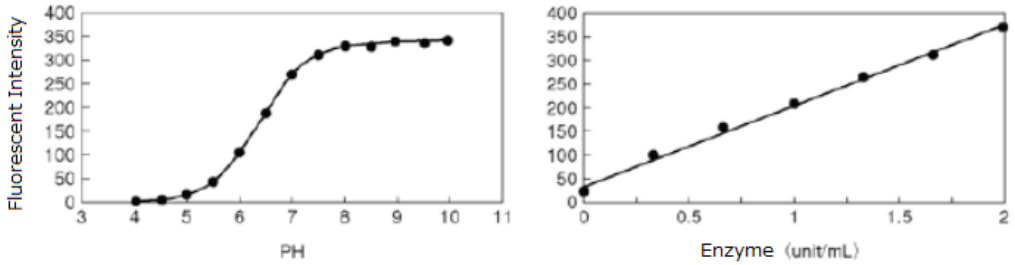
Table 1. Product information

Code no.	Product	Contents	Storage	Stability
SK4002 -01	**TokyoGreen®-βGlu**	1 mg（in DMSO 0.4 mL）	Freeze-preservation, desiccate and protect from light.	1 year (unopened)

TokyoGreen®-βGlu is permeable through the cell membrane and is fluorescent substrate［9- (4'-methoxy-2'-methylphenyl) -6- (β-D-glucopylanosyloxy) -xanthen-3-one］for detecting β-glucosidase. Non-fluorescent **TokyoGreen®-βGlu** is hydrolyzed by the β-glucosidase, and generates bright fluorescent **TokyoGreen®**.

1. About TokyoGreen®-βGlu

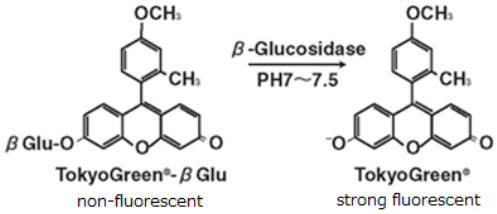
- **TokyoGreen®-βGlu** is recently-developed fluorescent chemical detecting the activity of β-glucosidase with high sensitivity.
- **TokyoGreen®**, generated by hydrolysis of **TokyoGreen®-βGlu**, has strong fluorescence under the wide range of neutral and basic pH condition (left figure).
- Fluorescent intensity in in proportional to the activity of β-glucosidase (right figure).



Fluorescent intensity (Ex. 492 nm、Em. 510 nm) was measured 500 sec after adding β-Glucosidase (Almond) to TokyoGreen®-βGlu 10 μM in Phosphate Buffer (pH7.0).

2. Principle of the measurement

Non-fluorescent **TokyoGreen®-βGlu** is hydrolyzed by the β-galactosidase, and generates bright fluorescent **TokyoGreen®**. **TokyoGreen®** has bright green fluorescence (510 nm) when it is irradiated by the 490 nm excitation light.



3. Contents

TokyoGreen®-βGlu 1mg (5 mM in DMSO 0.4mL)

$C_{27}H_{26}O_9$ Mw：494.49

4. Reference

1. Y. Urano, M. Kamiya, K. Kanda, T. Ueno, K. Hirose, T. Nagano: *J. Am. Chem. Soc*. 127, 4888-4894 (2005).

GORYO Chemical, Inc.
Hokudai Business-Spring, 2F, Kita 21 Nishi 12-2, Kita-ku,
Sapporo 001-0021 JAPAN
TEL: +81-11-214-9422 FAX: +81-11-351-1822
URL: http://www.goryochemical.com/