FDGlcU [Fluorescein di-β-D-glucuronide]

Cat. No. DYE-150 **Lot. No.** (See product label)

SPECIFICATION

Product Overview	
Description	The beta-glucuronidase (GUS) enzyme from E. coli (EC 3.2.1.31) has been well documented to provide desirable characteristics as a marker gene in transformed plants. The GUS reporter gene system has many advantages including stable expression of E. coli GUS enzyme, no interference with normal plant metabolism, and low intrinsic GUS activity in higher plants. FDGlcU is considered to be one of the most sensitive fluorogenic substrates available for detecting beta-glucuronidase. The colorless and nonfluorescent FDGlcU is hydrolyzed to highly fluorescent fluorescein, which exhibits excellent spectral properties (Ex/Em = 492/520 nm) that match the optimal detection window of most fluorescence instruments. Glucuronidase-catalyzed hydrolysis of FDGlcU can be followed by fluorescence increase around 520 nm. Alternatively, FDGlcU can also be used to detect glucuronidase in a chromogenic mode since the enzymatic product (fluorescein) exhibits a large extinction coefficient (close to 100,000 cm-1mol-1). FDGlcU has been used for identifying GUS-positive cells with fluorescence microscopy and flow cytometry.
Molecular Mass	684.55
Ex(nm)	494
Em(nm)	521
Solvent	DMSO

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Storage	Store at -20°C in the dark. Dessicated.

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