# **PRODUCT** INFORMATION



## Fluorescein di-β-Galactopyranoside

Item No. 26860

CAS Registry No.:	17817-20-8			
Formal Name:	3',6'-bis(β-D-galactopyranosyloxy)-	ОН		ОН
	spiro[isobenzofuran-1(3H),9'-[9H]			
	xanthen]-3-one	HO. ,		
Synonym:	FDG			
MF:	C <sub>32</sub> H <sub>32</sub> O <sub>15</sub>			Ó CH
FW:	656.6		$\sim \times \sim$	Υ On
Purity:	≥95%			
Ex./Em. Max:	490/514 nm	HO-		ОН
Supplied as:	A solid			
Storage:	-20°C		$\rightarrow$	
Stability:	≥4 years			
Special Conditions: Protect from light and moisture				

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

### Laboratory Procedures

Fluorescein di- $\beta$ -galactopyranoside is supplied as a solid. A stock solution may be made by dissolving the fluorescein di- $\beta$ -galactopyranoside in the solvent of choice, which should be purged with an inert gas. Fluorescein di- $\beta$ -galactopyranoside is soluble in the organic solvent DMSO.

### Description

Fluorescein di- $\beta$ -galactopyranoside is a fluorogenic substrate for  $\beta$ -galactosidase.<sup>1</sup> Upon enzymatic cleavage by  $\beta$ -galactosidase, fluorescein is released and its fluorescence can be used to quantify  $\beta$ -galactosidase activity. Fluorescein displays excitation/emission maxima of 490/514 nm, respectively.<sup>1,2</sup>

#### References

- 1. Plovins, A., Alvarez, A.M., Ibañez, M., et al. Use of fluorescein-di-β-D-galactopyranoside (FDG) and  $C_{12}$ -FDG as substrates for  $\beta$ -galactosidase detection by flow cytometry in animal, bacterial, and yeast cells. Appl. Environ. Microbiol. 60(12), 4638-4641 (1994).
- 2. Hermanson, G.T. Fluorescent probes. Bioconjugate Techniques. Audet, J., editor, 3rd edition, Elsevier (2013).

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.

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