

2-NBDG

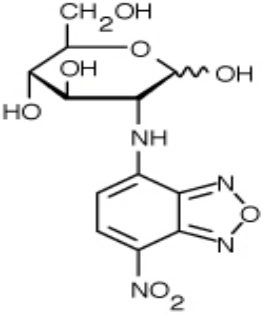
Catalog Number	Packaging Size
C242	5 mg

Storage upon receipt: -20°C, protected from light

Introduction

2-NBDG is a fluorescent glucose analog that has been used to monitor glucose uptake in live cells, as an indicator of cell viability. Although sensitive to its environment NBD fluorescence typically displays excitation/emission maxima of ~465/540 nm and can be visualized using optical filters designed for fluorescein.

Specifications

Label:	2-NBDG	
Ex/Em:	465/540 nm	
Detection Method:	Fluorescent	
Solubility:	DMSO, DMF	
Molecular Formula	C ₁₂ H ₁₄ N ₄ O ₈	
Molecular Weight:	342.26	
CAS Number:	186689-07-6	
Storage Conditions:	-20°C, protect from light	
Shipping Condition:	Room Temperature	

Applications

Glucose transport indicator

References:

Forward chemical genetic approach identifies new role for GAPDH in insulin signaling.
Min J, Kyung Kim Y, Cipriani PG, Kang M, Khersonsky SM, Walsh DP, Lee JY, Niessen S, Yates JR, Gunsalus K, Piano F, Chang YT
Nat Chem Biol (2007) 3:55-59

A novel fluorescent derivative of glucose applicable to the assessment of glucose uptake activity of Escherichia coli.

Yoshioka K, Takahashi H, Homma T, Saito M, Oh KB, Nemoto Y, Matsuoka H
Biochim Biophys Acta (1996) 1289:5-9

Evaluation of 2-[N-(7-nitrobenz-2-oxa-1,3-diazol-4-yl)amino]-2-deoxy-D-glucose, a new fluorescent derivative of glucose, for viability assessment of yeast *Candida albicans*.
Yoshioka K, Oh KB, Saito M, Nemoto Y, Matsuoka H
Appl Microbiol Biotechnol (1996) 46:400-404