

## 2-NBDG

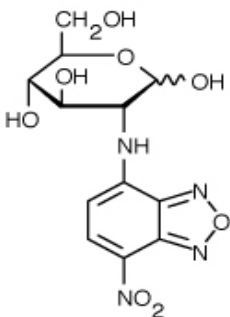
Catalog Number	Packaging Size
C242	5 mg

**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

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