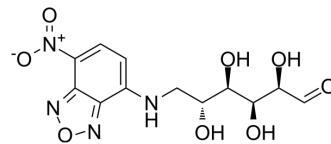


6-NBDG

Cat. No.:	HY-113870
CAS No.:	108708-22-1
Molecular Formula:	C ₁₂ H ₁₄ N ₄ O ₈
Molecular Weight:	342.26
Target:	Fluorescent Dye
Pathway:	Others
Storage:	-20°C, protect from light, stored under nitrogen * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light, stored under nitrogen)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 10 mg/mL (29.22 mM; Need ultrasonic and warming)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	2.9218 mL	14.6088 mL	29.2176 mL
5 mM	0.5844 mL	2.9218 mL	5.8435 mL
10 mM	0.2922 mL	1.4609 mL	2.9218 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

6-NBDG is a fluorescent glucose analogue, it can be used for fluorescence imaging and monitoring glucose transport and uptake. 6-NBDG can be used as a fluorescent probe for detecting macrophage-rich atherosclerotic plaques^{[1][2]}.

In Vitro

Guidelines (Following is our recommended protocol. This protocol only provides a guideline, and should be modified according to your specific needs).

1. Incubate sample with RPMI (without glucose) containing a final concentration of 200 μM 6-NBDG.
2. Use a curved forcep to embeds sample into the mixture, and stretches the samplet through a drop of agarose (40°C, 20 μL) places on a pre-heated (40°C) glass slide.
3. Gently place another preheated glass slide on the top of sample, so that the whole sample embeds into the agarose-6-NBDG mixture.
4. Take confocal images with a confocal laser scanning microscope (Ex: 471 nm, Em: 500–600 nm)^[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Hansen TV, et al. Glucose Absorption by the Bacillary Band of *Trichuris muris*. PLoS Negl Trop Dis. 2016 Sep 2;10(9):e0004971.

[2]. Zaman RT, et al. Fiber-optic system for dual-modality imaging of glucose probes 18F-FDG and 6-NBDG in atherosclerotic plaques. PLoS One. 2014 Sep 18;9(9):e108108.

Caution: Product has not been fully validated for medical applications. For research use only.

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