Product Data Sheet

Product Name: NFQ1
Cat. No.: GC27796

Chemical Properties

Cas. No.	1262391-07-0		
Chemical Name	Methanesulfonothioic acid, S-[2-[[2-[4-[(7-nitro-2,1,3-benzoxadiazol-4-yl)amino]phenyl]acetyl]amino]ethyl] este		
SMILES	CS(=O)(SCCNC(CC1=CC=C(C=C1)NC2=CC=C(C3=NON=C23)[N+]([O-])=O)=O)=O		
Formula	$C_{17}H_{17}N_5O_6S_2$	M.Wt	451.48
Solubility		Storage	4°C, sealed storage, away from moisture and light
General tips	For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure			

Background

NFQ1 is a non-fluorescent quencher (absorption wavelength: 474 nm), and is used for a new type of One Sample Fluorescence Resonance Energy Transfer (OS-FRET) method. OS-FRET enable measurement of unquenched donor emission in the same sample. NFQ1 shows broad absorption

Product Data Sheet

spectrum ensuring its utility as a dark acceptor for many donors[1].
In Vitro, NFQ1 is used for One Sample Fluorescence Resonance Energy Transfer (OS-FRET) method employing a novel, non-fluorescent methanethiosulfonate-linked acceptor that can be reversibly coupled to a target sulfhydryl residue via a disulfide bond. After the quenched donor emission is quantitated the acceptor is removed by reduction, enabling measurement of unquenched donor emission in the same sample[1].

References:
[1]. Annette H Erbse, et al. OS-FRET: a new one-sample method for improved FRET measurements. Biochemistry. 2011 Feb 1;50(4):451-7.

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