Product Data Sheet

Product Name: PMQA
Cat. No.: GC61561

Chemical Properties

Cas. No.	1263820-18-3		
SMILES	O=C(NC1=C2N=CC=CC2=CC=C1)CNCC3=NC=CC=C3		
Formula	$C_{17}H_{16}N_4O$	M.Wt	292.34
Solubility		Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ 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	PMQA		

Background

PMQA (Zn-green), an 8-aminoquinoline-based ratiometric fluorescent sensor, demonstrates the Zn2+-induced redshift of emission (85 nm). PMQA (Zn-green) is a cell membrane-permeable probe and suitable for imaging Zn2+ in living cells[1].

After incubation with PMQA (20 μM) for 1 h, weak green fluorescence appeared, presumably caused by the probe capturing intracellular zinc from its native ligands since PMQA has high affinity for zinc[1]. The response of PMQA to Zn2+ can be reversed by N,N,N',N'-tetrakis(2-pyridylmethyl)ethylenediamine (TPEN) or EDTA[1]. When the stock solution of PMQA (0.1 mM in Tris Buffer) is kept at room temperature for a week, there is no significant loss of PMQA determined by HPLC analysis[1].

[1]. Liangwei Zhang, et al. 8-Aminoquinoline-based ratiometric zinc probe: unexpected binding mode and its application in living cells. Bioorg Med Chem Lett. 2013 Jun 15;23(12):3511-4.

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