Data Sheet (Cat.No.T3592)

TargetMol®
YOUR TARGET MOLECULES

MQAE

Chemical Properties

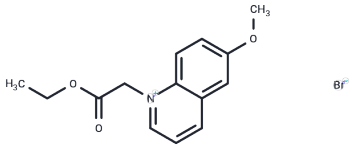
CAS No. : 162558-52-3

Formula: C14H16BrNO3

Molecular Weight: 326.19

Appearance: no data available

Storage: store at low temperature,keep away from direct sunlight
Powder: -20°C for 3 years | In solvent: -80°C for 1 year



Biological Description

Description	MQAE, a fluorescent chloride ion indicator, is more sensitive and selective than 36Cl and microelectrode-based methods for chloride measurement in cells. MQAE is quenched via collision with chloride.
Targets(IC50)	Others
In vitro	Bath-applied to acute brain slices, MQAE provides high-quality labeling of neuronal cells and their processes[1]. MQAE fluorescence is an adequate and comparable method for measuring cAMP-dependent chloride transport in dozens of individual cells[2]. MQAE can be used to measure intracellular chloride concentration in primary cultures of rat aortic smooth muscle cells (VSMC)[3].

Solubility Information

Solubility	DMSO: 55 mg/mL (168.61 mM), (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.0657 mL	15.3285 mL	30.657 mL
5 mM	0.6131 mL	3.0657 mL	6.1314 mL
10 mM	0.3066 mL	1.5328 mL	3.0657 mL
50 mM	0.0613 mL	0.3066 mL	0.6131 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

Kovalchuk Y, et al. Two-photon chloride imaging using MQAE in vitro and in vivo. Cold Spring Harb Protoc. 2012 Jul 1;2012(7):778-85.