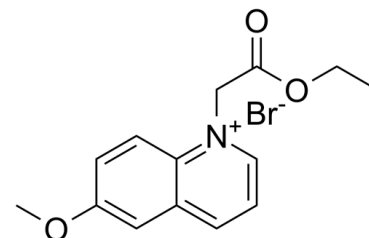


## Data Sheet

Product Name:	MQAE
Cat. No.:	CS-6018
CAS No.:	162558-52-3
Molecular Formula:	C <sub>14</sub> H <sub>16</sub> BrNO <sub>3</sub>
Molecular Weight:	326.19
Target:	Others
Pathway:	Others
Solubility:	DMSO : ≥ 35 mg/mL (107.30 mM)



### BIOLOGICAL ACTIVITY:

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

### References:

- [1]. 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.
- [2]. Andersson C, et al. Determination of chloride efflux by X-ray microanalysis versus MQAE-fluorescence. Microsc Res Tech. 2002 Dec 15;59(6):531-5.
- [3]. Koncz C, et al. Use of MQAE for measurement of intracellular [Cl<sup>-</sup>] in cultured aortic smooth muscle cells. Am J Physiol. 1994 Dec;267(6 Pt 2):H2114-23.

### CAIndexNames:

Quinolinium, 1-(2-ethoxy-2-oxoethyl)-6-methoxy-, bromide (1:1)

### SMILES:

COC1=CC2=CC=C[N+](CC(OCC)=O)=C2C=C1.[Br-]

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

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