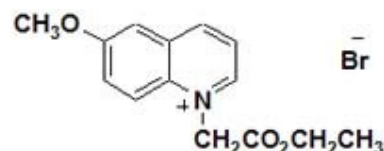


## MQAE

Chloride indicator to measure chloride transportation in liposome membranes

### Product Description

<b>Name :</b>	<b>1-(Ethoxycarbonylmethyl)-6-methoxyquinolinium bromide (MQAE)</b> 6-(Methoxyquinolinio)acetic acid ethyl ester bromide
<b>Catalog Number :</b>	FP-65865A      100 mg
<b>Structure :</b>	C <sub>14</sub> H <sub>16</sub> BrNO <sub>3</sub>
<b>Molecular Weight :</b>	MW= 326,19
<b>Solubility:</b>	DMSO, DMF, CH <sub>3</sub> OH, H <sub>2</sub> O
<b>Absorption / Emission :</b>	$\lambda_{exc}/\lambda_{em}$ (CH <sub>3</sub> OH) = 351 / 462 nm
<b>EC (M<sup>-1</sup> cm<sup>-1</sup>) :</b>	2 800



**Storage:**      Room temperature      Protect from light and moisture

### Introduction

MQAE is an improved chloride indicator that has greater sensitivity to chloride ( $K_{sv} = 200 \text{ M}^{-1}$ ) than SPQ ( $K_{sv} = 118 \text{ M}^{-1}$ ) and higher fluorescence quantum yield. The ester group of MQAE may slowly hydrolyze inside cells, resulting in a change in its fluorescence response.

### Directions for use

#### Guidelines for use

Protocol may be found in the literature.

#### References

- **Banderali U. et al.**, Control of apical membrane chloride permeability in the renal A6 cell line by nucleotides, *J. Physiol.*, 519: 737 - 751 (1999) [Article](#)
- **Hoffman J. & Geibel J.**, Fluorescent imaging of Cl<sup>-</sup> in *Amphiuma* red blood cells: How the nuclear exclusion of Cl<sup>-</sup> affects the plasma membrane potential, *PNAS*, 102: 921 - 926 (2005) [Article](#)
- **Schachter J. et al.**, ATP-induced P2X7-associated uptake of large molecules involves distinct mechanisms for cations and anions in macrophages, *J. Cell Sci.*, 121: 3261 - 3270 (2008) [Article](#)

### Technical and scientific information

#### Related / associated products and documents

See [BioSciences Innovations catalogue](#) and [e-search tool](#).

- Cell Navigator™ Lysosomal Staining Kit, Green Fluorescence, [JQ8570](#)
- Lucifer Yellow CH, Lithium salt, [FP-15437A](#)
- Propidium iodide, [FP-31238B](#)
- SPQ, [FP-46922A](#)

## Ordering information

[Catalog size quantities and prices may be found at www.interchim.com/](http://www.interchim.com/)

Please inquire for higher quantities (availability, shipment conditions).

For any information, please ask : FluoProbes® / Interchim; Hotline : +33(0)4 70 03 73 06

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