

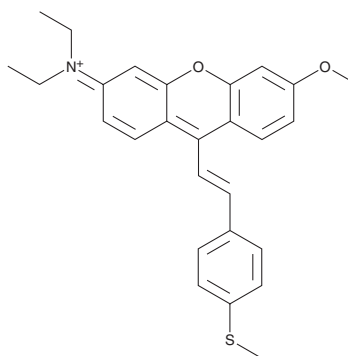
# PRODUCT INFORMATION



## MXS

Item No. 32726

**Formal Name:** (E)-N-ethyl-N-(6-methoxy-9-(4-(methylthio)styryl)-3H-xanthen-3-ylidene)ethanaminium  
**MF:** C<sub>27</sub>H<sub>28</sub>NO<sub>2</sub>S  
**FW:** 430.6  
**Purity:** ≥90%  
**UV/Vis.:** λ<sub>max</sub>: 230, 296, 530 nm  
**Ex./Em. Max:** 530/654 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

MXS is supplied as a crystalline solid. A stock solution may be made by dissolving the MXS in the solvent of choice, which should be purged with an inert gas. MXS is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of MXS in these solvents is approximately 30 mg/ml. MXS is slightly soluble in ethanol.

MXS is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, MXS should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. MXS has a solubility of approximately 0.16 mg/ml in a 1:5 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

MXS is a mitochondria-targeted fluorescent probe for hypochlorous acid (HOCl).<sup>1</sup> It selectively fluoresces in the presence of OCl<sup>-</sup> over O<sub>2</sub>, H<sub>2</sub>O<sub>2</sub>, NO, NO<sub>2</sub><sup>-</sup>, NO<sub>3</sub><sup>-</sup>, O<sub>2</sub><sup>-</sup>, ONOO<sup>-</sup>, and •OH when used at a concentration of 10 μM. MXS has been used to monitor real-time mitochondrial HOCl levels in living cells. It displays excitation/emission maxima of 530/654 nm, respectively.

### Reference

1. Gong, J., Liu, C., Cai, S., *et al.* Novel near-infrared fluorescent probe with a large Stokes shift for sensing hypochlorous acid in mitochondria. *Org. Biomol. Chem.* **18(38)**, 7656-7662 (2020).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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