# PRODUCT INFORMATION



## MCLA (hydrochloride)

Item No. 18673

CAS Registry No.: 128322-44-1

Formal Name: 6-(4-methoxyphenyl)-2-methyl-

imidazo[1,2-a]pyrazin-3(7H)-one,

monohydrochloride

MF: C<sub>14</sub>H<sub>13</sub>N<sub>3</sub>O<sub>2</sub> • HCl

FW: 291.7 ≥98% **Purity:** 

UV/Vis.:  $\lambda_{max}$ : 264, 356, 432 nm

Supplied as: A crystalline solid

Storage: -20°C Stability: ≥4 years

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

# **Laboratory Procedures**

MCLA (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the MCLA (hydrochloride) in the solvent of choice, which should be purged with an inert gas. MCLA (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of MCLA (hydrochloride) in these solvents is approximately 2, 5, and 10 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of MCLA (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of MCLA (hydrochloride) in PBS (pH 7.2) is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

MCLA (hydrochloride) is a Cypridina luciferin analog that is used to detect superoxide generated by activated leukocytes and macrophages.<sup>1</sup> It emits chemiluminescence near 654 nm by reaction with superoxide or singlet oxygen.1

#### Reference

1. Takahashi, A., Nakano, M., Mashiko, S., et al. The first observation of O<sub>2</sub>- generation in in situ lungs of rats treated with drugs to induce experimental acute respiratory distress syndrome. FEBS Lett. 261(2), 369-372 (1990).

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

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.

## WARRANTY AND LIMITATION OF REMEDY

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