PRODUCT INFORMATION

Monobromobimane
Item No. 17097

CAS Registry No.: 71418-44-5
Formal Name: 3-(bromomethyl)-2,5,6-trimethyl-1H,7H-pyrazolo[1,2-a]pyrazole-1,7-dione

Synonyms: MBBr, NSC 608544
MF: C\textsubscript{10}H\textsubscript{11}BrN\textsubscript{2}O\textsubscript{2}
FW: 271.1

Purity: ≥98%
UV/Vis.: λ\textsubscript{max} = 247, 383 nm
Ex./Em. Max: 398/490 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

Monobromobimane is supplied as a crystalline solid. A stock solution may be made by dissolving the monobromobimane in the solvent of choice, which should be purged with an inert gas. Monobromobimane is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of monobromobimane in ethanol is approximately 1 mg/ml and approximately 50 mg/ml in DMSO and DMF.

Description

Monobromobimane is a thiol-reactive fluorogenic probe. It is cell-permeable, reacts rapidly at physiological pH with available thiol groups, and generates a stable fluorescent signal.\(^1\) Monobromobimane can be used to evaluate or quantify a variety of compounds containing reactive sulfur or thiol groups, including H\textsubscript{2}S, glutathione, proteins, and nucleotides.\(^2-4\) The absorption and emission maxima for monobromobimane are 398 and 490 nm, respectively.\(^6\)

References