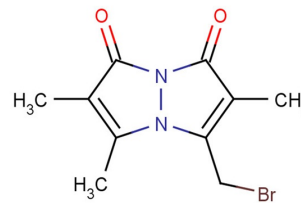


## Bromobimane

## Chemical Properties

CAS No.:	71418-44-5
Formula:	C <sub>10</sub> H <sub>11</sub> BrN <sub>2</sub> O <sub>2</sub>
Molecular Weight:	271.11
Appearance:	N/A
Storage:	0-4°C for short term (days to weeks), or -20°C for long term (months).



## Biological Description

Description	Bromobimane is nonfluorescent. It converts into fluorescent products when reacts with small thiols.
Targets(IC <sub>50</sub> )	Others: None
In vitro	Bromobimanes in solution (aqueous or organic solvents of medium polarity) react with small thiols, and with reactive protein thiol groups (e.g., hemoglobin). The reactions of bromobimanes with thiols are second-order and dependent on pH, the active nucleophile being the thiolate anion. The reaction of bromobimane with a thiolate converts the nonfluorescent agent into water-soluble fluorescent products [1]. The highly selective, rapid reactivity of bromobimanes toward thiols, the stability and fluorescence yield of the thiol derivatives, the ease of separation of the derivatives by reversed-phase HPLC, and the availability of both cell-penetrating and nonpenetrating forms, make the use bromobimanes an extremely powerful approach to the analysis of low molecular weight biothiols [2].

## Solubility Information

Solubility	DMSO: 86.6 mg/mL (319.43 mM) ( < 1 mg/ml refers to the product slightly soluble or insoluble)
------------	--

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.689 mL	18.443 mL	36.885 mL
5 mM	0.738 mL	3.689 mL	7.377 mL
10 mM	0.369 mL	1.844 mL	3.689 mL
50 mM	0.074 mL	0.369 mL	0.738 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

## Reference

1. Kosower EM, et al. Bromobimane probes for thiols. Methods Enzymol. 1995;251:133-48.
2. Newton GL, et al. Determination of biothiols by bromobimane labeling and high-performance liquid chromatography. Methods Enzymol. 1995;251:148-66.

Inhibitors · Natural Compounds · Compound Libraries

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use.

Tel:781-999-4286

E-mail:[info@targetmol.com](mailto:info@targetmol.com)

Address:36 Washington Street,Wellesley Hills,MA 02481