

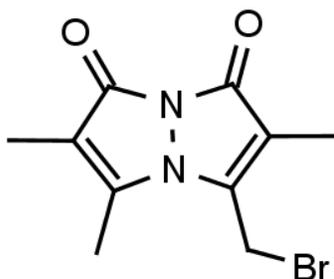


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## Technical Data Sheet

**For research use only**

**Product Name:** Monobromobimane



Catalog Number	CAS Registry No.	MW (g/mol)	Chemical Formula	Solubility
F-0030	71418-44-5	271.1	C <sub>10</sub> H <sub>11</sub> BrN <sub>2</sub> O <sub>2</sub>	Methanol, DMF and DMSO

**Purity:** 98%

**Storage:** Monobromobimane is stable for at least one year when stored as a solid, protected from moisture, at -20 °C. Protect from light.

**Field of Interest:** Monobromobimane reacts with thiols, sulfide, thiosulfate and sulfite to generate a fluorescent product with an excitation/ emission spectra of 394/ 490 nm<sup>1</sup>. Monobromobimane reacts with glutathione and other low molecular weight sulfhydryls and is fluorescent upon conjugation<sup>2</sup>. When reacting with sample add monobromobimane at a final concentration between 10 µM and 2 mM (depending on detection requirements) for 15-20 minutes at 25 °C in the dark<sup>3-5</sup>.

### References:

1. Gainer, H.; Kosower, N. S. Histochemical demonstration of thiols and disulfides by the fluorescent labeling agent, monobromobimane: an application to the hypothalamo-neurohypophysial system. *Histochemistry* **1980**, 68, 309-15.
2. Hulbert, P. B.; Yakubu, S. I. Monobromobimane: a substrate for the fluorimetric assay of glutathione transferase. *J Pharm Pharmacol* **1983**, 35, 384-6.
3. Alkhalfioui, F.; Renard, M.; Vensel, W. H.; Wong, J.; Tanaka, C. K.; Hurkman, W. J.; Buchanan, B. B.; Montrichard, F. Thioredoxin-linked proteins are reduced during germination of *Medicago truncatula* seeds. *Plant Physiol* **2007**, 144, 1559-79.
4. Catania, J. M.; Pershing, A. M.; Gandolfi, A. J. Precision-cut tissue chips as an in vitro toxicology system. *Toxicol In Vitro* **2007**, 21, 956-61.
5. Momma, M. A pepsin-resistant 20 kDa protein found in red kidney bean (*Phaseolus vulgaris* L.) identified as basic subunit of legumin. *Biosci Biotechnol Biochem* **2006**, 70, 3058-61.

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