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## PRODUCT AND SAFETY DATA SHEET

PRODUCT NAME: Coelenterazine i

CATALOG #: 10121/10121-1/10121-2

**MOLECULAR**  $C_{26}H_{20}IN_3O_2$  **INFORMATION:** Mwt: 533.36

**PROPERTIES:** 

Color & FormYellow solidPurity $\geq$  98% by HPLC

**Solubility** Soluble in MeOH or EtOH, **AVOID** DMSO

Absorption440 nmEmission Maxima476 nmExtinction8500(MeOH)

Coefficient

STORAGE AND HANDLING:

Solution is susceptible to oxidation by air. For best results, keep solution from light and store at < -70°C under nitrogen or argon. Keep solid at -20 °C or -70 °C and protect from light under nitrogen or argon for long-term storage. Keep calcium free when stored in solution (avoid using glass container).

APPLICATION:

Coelenterazine i is a synthetic derivative of coelenterazine. Its luminescence intensity is about 3% that of native coelenterazine and its response time to calcium is the slowest of all coelenterazine analogs.

Bioitium also offers a number of other coelenterazine analogs. The luminescent properties of these analogs are listed in the table below.

Ref: 1) Biochem. J. **261**, 913(1989); 2) Cell Calcium **12**, 635(1991); 3) Cell Calcium, **14**, 373 (1993); 4) Mol Imaging, **3** (1), 43(2004 Jan)

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## **Luminescent Properties of Coelenterazine Products\***

Cat. #	Coelentera- zine Product	Emission Maximum	Relative Luminescence	Relative	Half-rise Time (s)
	Zine Froduct	(nm)	capacity	Intensity	Time (s)
10110	native	466	1.00	1.00	0.4-0.8
10112	cp	442	0.95	15	0.15-0.3
10114	f	473	0.80	18	0.4-0.8
10117	fcp	452	0.57	135	0.4-0.8
10111	h	466	0.82	10	0.4-0.8
10113	hcp	444	0.67	190	0.15-0.3
10121	i	476	0.70	0.03	8
10116	ip	441	0.54	47	1
10115	n	467	0.26	0.01	5
10122	methyl	Used as a strong nontoxic antioxidant for free radical and apoptosis research.			

<sup>\*</sup>All data from *Biochem. J.* **261**, 913(1989)

## Luminescent Properties of Coelenterazine Analogs with Renilla Luciferase\*

Cat. #	Coelentera- zine Product	Emission Maximum (nm)	Total Light (%)	Initial Intensity (%)
10110	native	475	100	100
10112	cp	470	23	16
10124	e	418 and 475	137	750
10114	f	473	28	58
10111	h	475	41	57
10115	n	475	47	68

<sup>\*</sup> All data from Biochem. Biophys. Res. Commun. 233, 349(1997).

TOXICITY: Unknown

FIRST AID:	Potentially harmful. Avoid prolonged or repeated exposure. Avoid getting in eyes, on skin, or on
	clothing. Wash thoroughly after handling. If eye or skin contact occurs, wash affected areas with
	plenty of water for 15 minutes and seek medical advice. In case of inhaling or swallowing,
	move individual to fresh air and seek medical advice immediately.

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