46117 Landing Parkway, Fremont, CA 94538 U.S.A. Tel: 1-510-265-1027; Fax: 1-510-265-1352

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PRODUCT AND SAFETY DATA SHEET

PRODUCT NAME: Coelenterazine cp

CATALOG #: 10112/10112-1/10112-2

MOLECULAR C25H25N3O3 Mwt: 415.48 **INFORMATION:**

PROPERTIES:

Color & Form Yellow solid **Purity** > 97% by HPLC

Solubility Soluble in MeOH or EtOH, AVOID DMSO

Absorption 430 nm 442 nm **Emission Maxima**

Extinction 7000 (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 cp is a synthetic derivative of coelenterazine. It generates luminescence

intensity 15 times higher and has a faster response time to calcium than native

coelenterazine does.

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 with Apoaequorin*

Cat.#	Coelentera- zine Product	Emission Maximum (nm)	Relative Luminescence capacity	Relative Intensity	Half-rise Time (s)
10110	native	466	1.00	1.00	0.4-0.8
10112	ср	442	0.95	15	0.15-0.3
10124	e	405/465	0.5	4	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

^{*}All data from *Biochem. J.* **261**, 913(1989)

Luminescent Properties of Coelenterazine Analogs with Renilla Luciferase*

Cat.#	Coelentera-	Emission	Total Light	Initial Intensity
	zine Product	Maximum (nm)	(%)	(%)
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

^{*} 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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