产品名称：CLZN [Coelenterazine, Native]
产品别名：腔肠素 ；Coelenterazine

生物活性：

Description	Coelenterazine is a luminescent enzyme substrate for apoaequorin and Renilla luciferase. Renilla luciferase and substrate coelenterazine has been used as the bioluminescence donor in bioluminescence resonance energy transfer (BRET) to detect protein-protein interactions. Coelenterazine is a superoxide anion-sensitive chemiluminescent probe and it can also be used in chemiluminescent detection of peroxynitrite[1] [2][3].
In Vitro	HCT-8 control cells, transiently expressing Renilla luciferase (RLuc), showed low bioluminescence due to P-glycoprotein–mediated efflux transport of coelenterazine. By comparison, transiently expressing RLuc HCT-8 cells, wherein P-glycoprotein was down-regulated with shRNAi, showed high bioluminescence[3].
In Vivo	The in vivo growth potential of HCC1806-RR was monitored by injecting animals with coelenterazine (2 mg/kg) i.v. and exposing them to a charged-coupled device (CCD) camera 5 minutes later. Rluc activity was detected as light emitted from the tumor cells and acquired as a pseudo-color image superimposed over a black and white photograph of the animal. All mice demonstrated very high Rluc activity at the primary site with the majority of mice simultaneously showing metastases to inguinal ILNs[4].
Solvent&Solubility	***In Vitro:*** **Ethanol : 2 mg/mL (4.72 mM;** Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.3615 mL	11.8075 mL	23.6150 mL
	5 mM	---	---	---
	10 mM	---	---	---

*请根据产品在不同溶剂中的溶解度选择合适的溶剂配制储备液；一旦配成溶液，请分装保存，避免反复冻融造成的产品失效。

储备液的保存方式和期限：-80°C, 6 months; -20°C, 1 month。-80°C 储存时，请在 6 个月内使用，-20°C 储存时，请在 1 个月内使用。

References

[1]. Markova SV, et al, Coelenterazine-dependent luciferases. Biochemistry (Mosc). 2015 Jun;80(6):714-32.

[2]. Lucas M, et al. Coelenterazine is a superoxide anion-sensitive chemiluminescent probe: its usefulness in the assay of respiratory burst in neutrophils. Anal Biochem. 1992 Nov 1;206(2):273-7.

[3]. Pichler A, et al. In vivo RNA interference-mediated ablation of MDR1 P-glycoprotein. Clin Cancer Res. 2005 Jun 15;11(12):4487-94.

[4]. Volk-Draper LD, et al. Novel model for basaloid triple-negative breast cancer: behavior in vivo and response to therapy. Neoplasia. 2012 Oct;14(10):926-42.