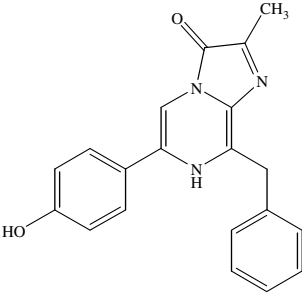


Instruction Manual

Catalog Number	PK-CA707-10122
Description	Methyl coelenterazine has been reported to be a superior antioxidant for cells against reactive oxygen species (ROS) such as singlet oxygen and superoxide anion. The coelenterazine derivative is membrane-permeant, nontoxic and highly reactive toward ROS. As oxidative stress is believed to be a mediator of apoptosis, methyl coelenterazine should be another important tool for apoptosis study.
Quantity	50 µg
Excitation / Emission Maxima	NA
Molecular Structure	 <p>The chemical structure shows a central imidazole ring system. One nitrogen atom is substituted with a methyl group (CH₃) and a carbonyl group (C=O). The other nitrogen atom is substituted with a benzyl group (CH₂-C₆H₅) and a 4-hydroxyphenyl group (C₆H₄-OH).</p>
Molecular Weight / Molecular Formula	331.37 Da; C ₂₀ H ₁₇ N ₃ O ₂
Purity	>96% (as determined by HPLC)
Appearance / Formulation / Solubility	Yellow solid. Coelenterazine and the derivatives can be reconstituted by dissolving in methanol or ethanol. Do not dissolve in dimethyl-sulfoxide (DMSO). Low solubility in water.
Storage & Stability	Store at -20°C. Store in tightly sealed vial. Protect from light.
Applications	Can be used as luminescent calcium indicator and for luciferase assays (e.g. with the Renilla luciferase reporter gene).
References	<ol style="list-style-type: none"> 1) Biochem. Pharmacol. 60, 471(2000) 2) Immunol. Today 15, 7(1994) 3) Anal. Biochem. 206, 273(1992) 4) Circ.Res. 84, 1203(1999) 5) Mol Imaging, 3 (1), 43(2004 Jan)
Caution	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.

FOR IN VITRO RESEARCH USE ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC PROCEDURES.