

## CERTIFICATE OF ANALYSIS

<b>PRODUCT:</b>	<b>Coelenterazine</b> [Native Coelenterazine], C <sub>26</sub> H <sub>21</sub> N <sub>3</sub> O <sub>3</sub> , M.W. 423.5, CAS# [55779-48-1]
<b>PRODUCT NUMBER:</b>	C-1212
<b>LOT NUMBER:</b>	B1941
<b>APPEARANCE:</b>	Yellow crystalline powder
<b>SOLUBILITY:</b>	Hardly soluble in water. Soluble in MeOH or EtOH. <b>AVOID DMSO!</b>
<b>PURITY (HPLC):</b>	≥ 98%
<b>ABSORPTION/EMISSION:</b>	429 nm/466 nm
<b>EXTINCTION COEFFICIENT:</b>	ca. 7400 cm <sup>-1</sup> M <sup>-1</sup> at 427 nm
<b>APPLICATION:</b>	Coelenterazine (native form) is a luminescent enzyme substrate for apoaequorin and <i>Renilla</i> luciferase. The aequorin complex has been used as an excellent calcium indicator that can measure a broad concentration range of calcium from ~0.1 μM to > 100 μM. <i>Renilla</i> luciferase, encoded by the <i>luc</i> gene, has been widely used as a reporter protein. <i>Renilla</i> luciferase/coelenterazine has also been used as the bioluminescence donor in bioluminescence resonance energy transfer (BRET) to study protein-protein interactions. Other uses of coelenterazine include chemiluminescent detection of superoxide anion and peroxynitrite in cells or tissues.

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**STORAGE & HANDLING:** Solution is susceptible to oxidation by air. For best results, keep solution from light and store at -70°C under nitrogen or argon. Use methanol or ethanol to prepare stock solution (> 1mg/mL). **DO NOT USE DMSO**, as coelenterazine may be unstable in this solvent! The stock solution can further be diluted with buffer to appropriate working concentration. We recommend fresh working concentration be prepared each time to avoid precipitate and decomposition.

Store at -20°C under nitrogen or argon. Keep calcium free when stored in solution (avoid using glass container).

**PROTECT FROM LIGHT!**

CAUTION: For laboratory research & scientific manufacturing use only. Not for human or drug use. The pharmacological and toxicological properties of this product have not been fully investigated. Use caution when handling. Do not use this compound if you are not fully trained or are unaware of the hazards involved.

Verified: DD