

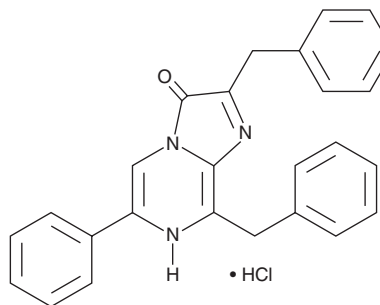
# PRODUCT INFORMATION



## Coelenterazine 400a (hydrochloride)

Item No. 25738

**CAS Registry No.:** 2320429-05-6  
**Formal Name:** 6-phenyl-2,8-bis(phenylmethyl)-imidazo[1,2-a]pyrazin-3(7H)-one, monohydrochloride  
**MF:** C<sub>26</sub>H<sub>21</sub>N<sub>3</sub>O • HCl  
**FW:** 427.9  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 246, 434 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Coelenterazine 400a (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the coelenterazine 400a (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Coelenterazine 400a (hydrochloride) is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of coelenterazine 400a (hydrochloride) in these solvents is approximately 0.5 mg/ml. Coelenterazine 400a (hydrochloride) is also slightly soluble in ethanol.

### Description

Coelenterazine 400a is a bisdeoxy derivative of coelenterazine (Item No. 16123) that displays an emission maximum of 395 nm following conversion by *Renilla* luciferase (Rluc).<sup>1,2</sup> It is used in bioluminescence resonance energy transfer 2 (BRET<sup>2</sup>) protocols, whereas coelenterazine h (Item No. 16894), which displays an emission maximum of 475 nm upon conversion by Rluc, is used in BRET<sup>1</sup> protocols.<sup>3</sup> Coelenterazine 400a is commonly paired with class 1 and 3 GFP acceptors, including GFP2 and GFP10.<sup>2,3</sup> BRET<sup>2</sup> assays are commonly used in evaluating protein-protein interactions, including those involved in G protein-coupled receptor signaling.<sup>1,2,4</sup>

### References

- Bertrand, L., Parent, S., Caron, M., *et al.* The BRET2/arrestin assay in stable recombinant cells: A platform to screen for compounds that interact with G protein-coupled receptors (GPCRs). *J. Recept. Signal Transduct. Res.* **22(1-4)**, 533-541 (2002).
- Galés, C., Rebois, R.V., Hogue, M., *et al.* Real-time monitoring of receptor and G-protein interactions in living cells. *Nat. Methods* **2(3)**, 177-184 (2005).
- Pfleger, K.D. and Eidne, K.A. Illuminating insights into protein-protein interactions using bioluminescence resonance energy transfer (BRET). *Nat. Methods* **3(3)**, 165-174 (2006).
- Huang, Q., Acha, V., Yow, R., *et al.* Bioluminescence measurements in mice using a skin window. *J. Biomed. Opt.* **12(5):054012** (2007).

**WARNING**  
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

**SAFETY DATA**  
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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