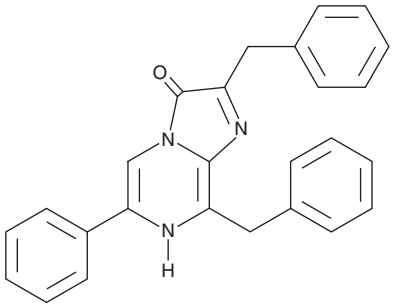
PRODUCT INFORMATION

Coelenterazine 400a

Item No. 16157

CAS Registry No.: 70217-82-2
Formal Name: 6-phenyl-2,8-*bis*(phenylmethyl)-imidazo[1,2-a]pyrazin-3(7H)-one
MF: $C_{26}H_{21}N_3O$
FW: 391.5
Purity: ≥95%
UV/Vis.: λ_{max}: 248, 361, 432 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years
Special Conditions: Do not dissolve in DMSO, may oxidize



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

Laboratory Procedures

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

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).[1,2] It is used in bioluminescence resonance energy transfer 2 (BRET^2) protocols, whereas coelenterazine h (Item No. 16894), which displays an emission maximum of 475 nm upon conversion by Rluc, is used in BRET^1 protocols.[3] Coelenterazine 400a is commonly paired with class 1 and 3 GFP acceptors, including GFP2 and GFP10.[2,3] BRET^2 assays are commonly used in evaluating protein-protein interactions, including those involved in G protein-coupled receptor signaling.[1,2,4]

References

1. Bertrand, L., Parent, S., Caron, M., *et al.* The BRET^2/arrestin assay in stable recombinant cells: A platform to screen for compounds that interact with G protein-couple receptors (GPCRS). *J. Recept. Signal Transduct. Res.* **22(1-4)**, 533-541 (2002).
2. 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).
3. 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).
4. Huang, Q., Acha, V., Yow, R., *et al.* Bioluminescence measurements in mice using a skin window. *J. Biomed. Opt.* **12(5)**:054012, (2007).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM