

Product Data Sheet

Product Name: Coelenterazine 400a (hydrochloride)

Cat. No.: GC43291

Chemical Properties

Cas. No. 2320429-05-6

Chemical Name 6-phenyl-2,8-bis(phenylmethyl)-imidazo[1,2-a]pyrazin-3(7H)-one, monohydrochloride

SMILES O=C1C(CC2=CC=CC=C2)=NC3=C(CC4=CC=CC=C4)NC(C5=CC=CC=C5)=CN31.Cl

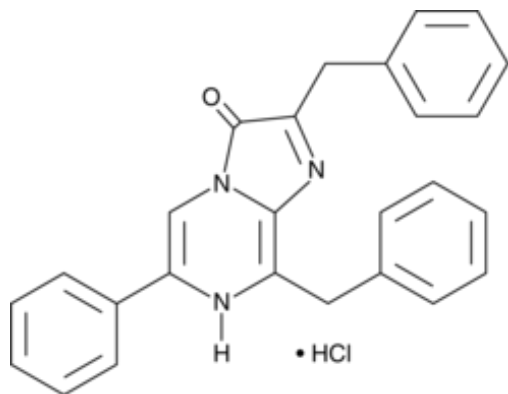
Formula $C_{26}H_{21}N_3O \cdot HCl$ M.Wt 427.9

Solubility 0.5mg/mL in DMSO, slightly soluble in ethanol Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure



Background

Coelenterazine 400a is a bisdeoxy derivative of coelenterazine 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 (BRET2) protocols, whereas coelenterazine h, which displays an emission maximum of 475 nm upon conversion by Rluc, is used in BRET1 protocols.³ Coelenterazine 400a is commonly paired with class 1 and 3 GFP acceptors, including GFP2 and GFP10.[2],[3] BRET2 assays are commonly used in evaluating protein-protein interactions, including those involved

Caution: Product has not been fully validated for medical applications. For research use only.

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in G protein-coupled receptor signaling.[1],[2],[4]

Reference:

- [1]. 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).
- [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]. Pflieger, 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).

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