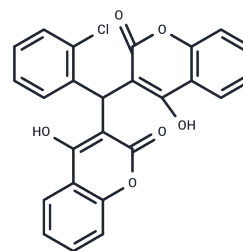


3,3'-((2-Chlorophenyl)methylene)bis(4-hydroxy-2H-chromen-2-one)

Chemical Properties

| | |
|-------------------|---------------------------------------------------------------------------------------------------------------------|
| CAS No. : | 4322-58-1 |
| Formula: | C ₂₅ H ₁₅ ClO ₆ |
| Molecular Weight: | 446.84 |
| Storage: | Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA. |



Biological Description

| | |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Description | 3,3'-((2-Chlorophenyl)methylene)bis(4-hydroxy-2H-chromen-2-one) is a non-nucleotide inhibitor of ectonucleotide pyrophosphatase/phosphodiesterase 1 (ENPP1; Ki = 50 μM). 1,2 It also inhibits urease (IC ₅₀ = 84.53 μM for the Jack bean enzyme). ³ |
| Targets(IC ₅₀) | Others,Antibacterial |

Solubility Information

| | |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Solubility | DMSO: 30 mg/mL (67.14 mM),Sonication is recommended. DMSO:PBS (pH 7.2) (1:7): 0.14 mg/mL (0.31 mM),Sonication is recommended. DMF: 30 mg/mL (67.14 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble) |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|-------|-----------|------------|------------|
| 1 mM | 2.2379 mL | 11.1897 mL | 22.3794 mL |
| 5 mM | 0.4476 mL | 2.2379 mL | 4.4759 mL |
| 10 mM | 0.2238 mL | 1.119 mL | 2.2379 mL |
| 50 mM | 0.0448 mL | 0.2238 mL | 0.4476 mL |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

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Onyedibe, K.I., Wang, M., and Sintim, H.O. ENPP1, an old enzyme with new functions, and small molecule inhibitors - A STING in the tale of ENPP1. *Molecules* 24(22), E4192 (2019).

Khan, K.M., Iqbal, S., Lodhi, M.A., et al. Biscoumarin: New class of urease inhibitors; economical synthesis and activity. *Bioorg. Med. Chem.* 12(8), 1963-1968 (2004).

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