

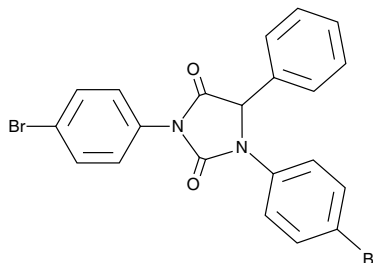
Product Information



CAY10508

Item No. 10008669

CAS Registry No.: 878533-35-8
Formal Name: 1,3-bis(4-bromophenyl)-5-phenyl-2,4-imidazolidinedione
MF: C₂₁H₁₄Br₂N₂O₂
FW: 486.2
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ_{max}: 248 nm



Laboratory Procedures

For long term storage, we suggest that CAY10508 be stored as supplied at -20°C. It should be stable for at least two years.

CAY10508 is supplied as a crystalline solid. A stock solution may be made by dissolving the CAY10508 in an organic solvent purged with an inert gas. CAY10508 is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of CAY10508 in DMSO is approximately 10 mg/ml and approximately 30 mg/ml in DMF.

CAY10508 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CAY10508 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. CAY10508 has a solubility of approximately 0.25 mg/ml in a 1:2 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Central cannabinoid (CB₁) receptor antagonists and inverse agonists exhibit therapeutic potential for obesity and drug dependence, while being devoid of psychotropic effects. CAY10508 is a potent and selective CB₁ receptor inverse agonist with a K_i value of 243 nM and an EC₅₀ of 195 nM.¹ A 10 μM concentration of CAY10508 resulted in 100% and 35% displacement of [³H]-CP-55,940 at the CB₁ and peripheral cannabinoid (CB₂) receptors, respectively. A [35S]-GTP_γS binding assay revealed the inverse agonist properties of CAY10508 at the CB₁ receptor.

Reference

- Muccioli, G.G., Wouters, J., Charlier, C., *et al.* Synthesis and activity of 1,3,5-triphenylimidazolidine-2,4-diones and 1,3,5-triphenyl-2-thioxoimidazolidin-4-ones: Characterization of new CB₁ cannabinoid receptor inverse agonists/antagonists. *J. Med. Chem.* **49**, 872-882 (2006).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/10008669

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY. NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent *via* email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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