PRODUCT INFORMATION



(±)-4-CMTB

Item No. 29680

| CAS Registry No.: | 300851-67-6 | ÇI |
|-------------------|---|--------|
| Formal Name: | 4-chloro-α-(1-methylethyl)-N-2- | |
| | thiazolyl-benzeneacetamide | |
| MF: | C ₁₄ H ₁₅ CIN ₂ OS | |
| FW: | 294.8 | |
| Purity: | ≥95% | Тн |
| UV/Vis.: | λ _{max} : 223, 269 nm | |
| Supplied as: | A solid | |
| Storage: | -20°C | i i /> |
| Stability: | ≥2 years | s |
| | | |

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

Laboratory Procedures

 (\pm) -4-CMTB is supplied as a solid. A stock solution may be made by dissolving the (\pm) -4-CMTB in the solvent of choice, which should be purged with an inert gas. (±)-4-CMTB is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of (±)-4-CMTB in these solvents is approximately 3, 5, and 0.3 mg/ml, respectively.

(±)-4-CMTB is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, (±)-4-CMTB should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. (±)-4-CMTB has a solubility of approximately 0.3 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

(±)-4-CMTB is a positive allosteric modulator of free fatty acid receptor 2 (FFAR2/GPR43) with an EC₅₀ value of 0.42 μ M for [³⁵S]GTP_YS binding to 293 T-REx cell membranes expressing the human receptor.¹ It selectively induces ERK1/2 phosphorylation in 293 T-REx cells expressing human FFAR2, but not FFAR1 or FFAR3.

Reference

1. Smith, N.J., Ward, R.J., Stoddart, L.A., et al. Extracellular loop 2 of the free fatty acid receptor 2 mediates allosterism of a phenylacetamide ago-allosteric modulator. Mol. Pharmacol. 80(1), 163-173 (2011).

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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