PRODUCT INFORMATION



BTS-54-505 (hydrochloride)

Item No. 39828

CAS Registry No.: 84484-78-6

Formal Name: $1-(4-chlorophenyl)-\alpha-(2-methylpropyl)-$

cyclobutanemethanamine,

monohydrochloride

MF: C₁₅H₂₂CIN • HCI

FW: 288.3 **Purity:** ≥98% Supplied as: A solid Storage: -20°C Stability: ≥4 vears • HCI

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

Laboratory Procedures

BTS-54-505 (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the BTS-54-505 (hydrochloride) in the solvent of choice. BTS-54-505 (hydrochloride) is soluble in the organic solvent DMSO, which should be purged with an inert gas. It is also soluble in water. We do not recommend storing the aqueous solution for more than one day.

Description

BTS-54-505 is an active metabolite of sibutramine. It inhibits norepinephrine, serotonin (5-HT), and dopamine uptake in rat cortical synaptosomes (IC $_{50}$ s = 0.066, 5.1, and 0.61 μ M, respectively). In vivo, BTS-54-505 prevents reserpine-induced ptosis in rats (ED $_{50}$ = 3.7 mg/kg) and decreases immobility in the Porsolt learned helplessness test in mice when administered at a dose of 10 mg/kg, BTS-54-505 (10 mg/kg) increases colonic temperature, a marker of thermogenesis, and decreases food intake in rats.²

References

- 1. Luscombe, G.P., Hopcroft, R.H., Tomas, P.C., et al. The contribution of metabolites to the rapid and potent down-regulation of rat cortical β-adrenoceptors by the putative antidepressant sibutramine hydrochloride. Neuropharmacology 28(2), 129-134 (1989).
- 2. Liu, Y.-L., Heal, D.J., and Stock, M.J. Mechanism of the thermogenic effect of Metabolite 2 (BTS 54 505), a major pharmacologically active metabolite of the novel anti-obesity drug, sibutramine. Int. J. Obes. Relat. Metab. Disord. 26(9), 1245-1253 (2002).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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.

WARRANTY AND LIMITATION OF REMEDY

subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website

Copyright Cayman Chemical Company, 10/10/2023

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