

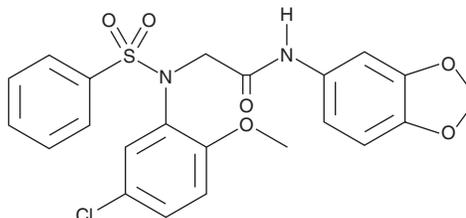
PRODUCT INFORMATION



LX2343

Item No. 27799

CAS Registry No.: 333745-53-2
Formal Name: N-1,3-benzodioxol-5-yl-2-[(5-chloro-2-methoxyphenyl)(phenylsulfonyl)amino]-acetamide
MF: C₂₂H₁₉ClN₂O₆S
FW: 474.9
Purity: ≥98%
UV/Vis.: λ_{max}: 293 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

LX2343 is supplied as a solid. A stock solution may be made by dissolving the LX2343 in the solvent of choice, which should be purged with an inert gas. LX2343 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of LX2343 in these solvents is approximately 25 and 33 mg/ml, respectively. LX2343 is also slightly soluble in ethanol.

Description

LX2343 is an inhibitor of β -site amyloid protein cleaving enzyme 1 (BACE1/ β -secretase; IC₅₀ = 11.43 μ M) and PI3K (IC₅₀ = 15.99 μ M).¹ It inhibits accumulation of A β (1-40) (A β 40) and A β 42 induced by streptozotocin (STZ; Item No. 13104) in both HEK293-APP_{SW} and CHO-APP cells, which express mutant and wild-type amyloid precursor protein (APP), respectively, in a concentration-dependent manner. It also inhibits STZ-induced increases in JNK and APP^{Thr668} phosphorylation as well as soluble APP β (sAPP β) protein levels. LX2343 (10 mg/kg per day) reduces levels of A β 40 and A β 42, as well as thioflavine S staining, in the cortex and hippocampus in the APP/PS1 transgenic mouse model of Alzheimer's disease. It also reduces cortical levels of PI3K, Akt, and mTOR phosphorylation and accumulation of the autophagy substrate p62, indicating increased autophagy. LX2343 (10 mg/kg per day) decreases path length and escape latency time in the Morris water maze in APP/PS1 mice.

Reference

1. Guo, X.D., Sun, G.L., Zhou, T.T., *et al.* Small molecule LX2343 ameliorates cognitive deficits in AD model mice by targeting both amyloid β production and clearance. *Acta Pharmacol. Sin.* **37(10)**, 1281-1297 (2016).

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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