

PRODUCT INFORMATION

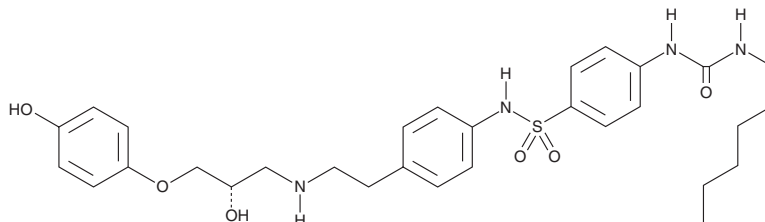


L-755,507

Item No. 18629

CAS Registry No.: 159182-43-1
Formal Name: 4-[[[(hexylamino)carbonyl]amino]-N-[4-[2-[[[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propyl]amino]ethyl]phenyl]-benzenesulfonamide]

MF: C₃₀H₄₀N₄O₆S
FW: 584.7
Purity: ≥98%
UV/Vis.: λ_{max}: 228, 265 nm
Supplied as: A crystalline 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

L-755,507 is supplied as a crystalline solid. A stock solution may be made by dissolving the L-755,507 in the solvent of choice, which should be purged with an inert gas. L-755,507 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of L-755,507 in ethanol and DMF is approximately 30 mg/ml and approximately 25 mg/ml in DMSO.

L-755,507 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, L-755,507 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. L-755,507 has a solubility of approximately 0.25 mg/ml in a 1:3 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

L-755,507 is a partial agonist of β_3 -adrenergic receptors ($EC_{50} = 0.43$ nM).¹ It displays more than 440-fold selectivity for β_3 - over β_1 - and β_2 -adrenoceptors (EC_{50} s = 580 and >10,000 nM, respectively).¹ At 5 μ M, this compound has been used to enhance CRISPR-mediated homology-directed repair efficiency by 3-fold for large fragment insertions and by 9-fold for point mutations.² L-755,507 has been used to identify signaling pathways activated through β_3 -adrenergic receptors.³

References

1. Parmee, E.R., Ok, H.O., Candelore, M.R., *et al.* Discovery of L-755,507: A subnanomolar human β_3 adrenergic receptor agonist. *Bioorg. Med. Chem. Lett.* **8(9)**, 1107-1112 (1998).
2. Yu, C., Liu, Y., Ma, T., *et al.* Small molecules enhance CRISPR genome editing in pluripotent stem cells. *Cell Stem Cell* **16(2)**, 142-147 (2015).
3. Sato, M., Hutchinson, D.S., Evans, B.A., *et al.* The β_3 -adrenoceptor agonist 4-[[[(Hexylamino)carbonyl]amino]-N-[4-[2-[[[(2S)-2-hydroxy-3-(4-hydroxyphenoxy)propyl]amino]ethyl]-phenyl]-benzenesulfonamide (L755507) and antagonist (S)-N-[4-[2-[[[3-(acetamidomethyl)phenoxy]-2-hydroxypropyl]amino]-ethyl]phenyl]benzenesulfonamide (L748337) activate different signaling pathways in Chinese hamster ovary-K1 cells stably expressing the human β_3 -adrenoceptor. *Mol. Pharmacol.* **74(5)**, 1417-1428 (2008).

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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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