
Product Data Sheet

Product Name: (S)-CCG-1423

Cat. No.: GC14497

Chemical Properties

Cas. No. 2319939-24-5

Chemical Name (S)-N-((1-((4-chlorophenyl)amino)-1-oxopropan-2-yl)oxy)-3,5-*bis*(trifluoromethyl)benzamide

SMILES O=C(NO[C@@H](C)C(NC1=CC=C(Cl)C=C1)=O)C2=CC(C(F)(F)F)=CC(C(F)(F)F)=C2

Formula C₁₈H₁₃ClF₆N₂O₃

M.Wt 454.8

Solubility ≤0.25mg/ml in ethanol;10mg/ml in DMSO;10mg/ml in dimethyl formamide

Storage Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure **Background**

(S)-CCG-1423 is a stereoisomer of CCG-1423. CCG-1423 is a Rho inhibitor involved in blocking signaling through myocardin-related transcription factor A (MRTF-A) and serum response factor (SRF) [1].

The Rho family of small GTPases plays an important role in cancer metastasis. Up-regulation of RhoA or RhoC has been associated with a poor clinical outcome. Rho GTPases are important for the actin cytoskeleton. The RhoA family plays an important role in multiple cellular processes central to tumor growth and metastasis [1].

CCG-14223 was an inhibitor for Rho/SRF pathway and displayed activity in several in vitro cancer cell functional assays. In PC-3 prostate cancer cells, CCG-1423 (< 1 μmol/L) potently inhibited lysophosphatidic acid-induced DNA synthesis. CCG-1423 inhibited the growth of RhoC-overexpressing melanoma lines (A375M2 and SK-Mel-147) at nanomolar

Caution: Product has not been fully validated for medical applications. For research use only.

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concentrations. CCG-1423 selectively stimulated apoptosis of the metastasis-prone, RhoC-overexpressing melanoma cell line (A375M2) when compared with the parental cell line (A375). CCG-1423 inhibited Rho-dependent invasion by PC-3 prostate cancer cells [1].

The S-isomer of CCG-1423 inhibited MRTF-A-dependent cellular events, including SRF-mediated gene expression and cell migration. The efficacy of (S)-CCG-1423 was more potent than the R-isomer [2].

References:

- [1] Evelyn C R, Wade S M, Wang Q, et al. CCG-1423: a small-molecule inhibitor of RhoA transcriptional signaling[J]. *Molecular cancer therapeutics*, 2007, 6(8): 2249-2260.
- [2] Watanabe B, Minami S, Ishida H, et al. Stereospecific inhibitory effects of ccg-1423 on the cellular events mediated by myocardin-related transcription factor a[J]. *PLoS one*, 2015, 10(8): e0136242.

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