

Product Data Sheet

Product Name: MLS-573151

Cat. No.: GC13096

Chemical Properties

Cas. No. 10179-57-4

Chemical Name 4-(4,5-dihydro-3,5-diphenyl-1H-pyrazol-1-yl)-benzenesulfonamide

SMILES NS(C(C=C1)=CC=C1N2C(C3=CC=CC=C3)CC(C4=CC=CC=C4)=N2)(=O)=O

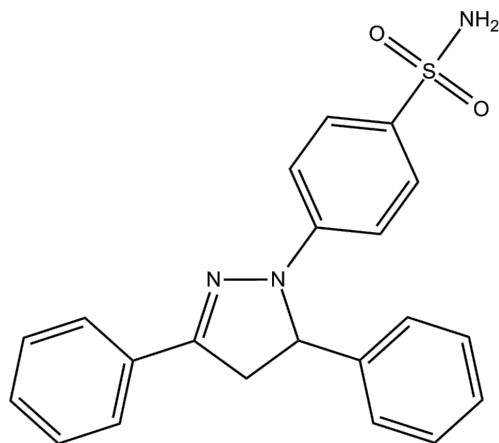
Formula $C_{21}H_{19}N_3O_2S$ M.Wt 377.5

Solubility $\leq 20\text{mg/ml}$ in DMSO; 30mg/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

MLS-573151 is a specific and cell permeable inhibitor of Cdc42 [1].

Cdc42 is a small GTPase of the Rho family involved in regulating signaling pathways that control diverse cellular functions such as cell morphology, cell migration, cell cycle progression and endocytosis [2].

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

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In vitro: MLS-573151 was a specific, cell permeable inhibitor of Cdc42 with an IC₅₀ of 2 μ M [1]. MLS-573151 showed no effect on other GTPases, including the related Rho family members RhoA, Rac1, and Rac2. MLS-573151 functioned by blocking the binding of GTP to Cdc42 [1]. In marrow-derived mesenchymal stem cells, MLS-573151 showed no effect on cell migration [3].

References:

- [1] Surviladze Z, Waller A, Wu Y, et al. Identification of a small GTPase inhibitor using a high-throughput flow cytometry bead-based multiplex assay[J]. Journal of biomolecular screening, 2010, 15(1): 10-20.
- [2] Qadir M I, Parveen A, Ali M. Cdc42: Role in Cancer Management[J]. Chemical biology & drug design, 2015, 86(4): 432-439.
- [3] Wang L, Yang L, Tian L, et al. Cannabinoid Receptor 1 Mediates Homing of Bone Marrow-Derived Mesenchymal Stem Cells Triggered by Chronic Liver Injury[J]. Journal of cellular physiology, 2017, 232(1): 110-121.

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