

Y-27632 Dihydrochloride

Catalog Number :1293823

RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information

Synonyms: Y 27632, N-(4-pyridyl)-4-(1-aminoethyl)cyclohexanecarboxamide, trans-4-[(1R)-1-Aminoethyl]-N-4-pyridinylcyclohexanecarboxamide dihydrochloride

Chemical Name: 4-[(1R)-1-aminoethyl]-N-pyridin-4-ylcyclohexane-1-carboxamide;dihydrochloride

Molecular Formula: C₁₄H₂₁N₃O₂HCl

Molecular Weight: 320.3

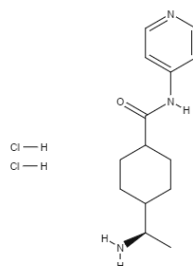
CAS Number: 129830-38-2

Purity: ≥98%

Applications: FA

Formulation: Crystalline solid

Storage: Product should be kept at -20°C.



Description

Y-27632 is a selective inhibitor of Rho-associated coiled-coil forming protein serine/threonine kinase (ROCK) family of protein kinases that selectively competes with ATP for binding to the catalytic site. It is reported to diminish dissociation-induced apoptosis, increase cloning efficiency, and facilitate subcloning after gene transfer in human embryonic stem cells (hES).

Preparation & Storage

Soluble in organic solvents such as ethanol and DMSO. DMSO up to 90mM. For solvent free solutions, soluble in PBS(pH7.2) up to 30mM.

References

- Ishizaki, T., Uehata, M., Tamechika, I., Keel, J., Nonomura, K., Maekawa, M., Narumiya, S. (2000). Pharmacological properties of Y-27632, a specific inhibitor of rho-associated kinases.;Molecular pharmacology,;57(5), 976-983.
- Fu, X., Gong, M. C., Jia, T., Somlyo, A. V., Somlyo, A. P. (1998). The effects of the Rho-kinase inhibitor Y-27632 on arachidonic acid-, GTPγS-, and phorbol ester-induced Ca²⁺-sensitization of smooth muscle.;FEBS letters,440(1), 183-187.
- Watanabe, K., Ueno, M., Kamiya, D., Nishiyama, A., Matsumura, M., Wataya, T., ... Sasai, Y. (2007). A ROCK inhibitor permits survival of dissociated human embryonic stem cells.;Nature biotechnology,;25(6), 681-686.