



Data Sheet

Research Use Only

Compound Name

Y-27632

Catalog Number

SM02

Activity

Y-27632 dihydrochloride is a water-soluble Rho-associated protein Kinase (ROCK) inhibitor.

Purity

>99%

Formula

$C_{14}H_{21}N_3O \cdot 2HCl \cdot H_2O$

Solubility

Water

Alternative Names

trans-4-[(1R)-1-Aminoethyl]-N-4-pyridinylcyclohexanecarboxamide dihydrochloride

Effect

Y-27632 increases the cloning efficiency of human embryonic stem cells (hESC). Enables the long term expansion of embryonic stem cells (ESC) with single cell passage. ESC treated with Y-27632 in a serum-free medium were consistently differentiated into many cell types, including neurons, muscle cells and hepatocytes.

CAS

146986-50-7

Molecular Weight

338.3

Stability

Stable at -20°C. Keep away from direct sunlight.

References

1. Uehata, M., et al. 1997. Nature. 389: 990-994. PMID: 9353125
2. Itoh, K., et al. 1999. Nat. Med. 5: 221-225. PMID: 9930872
3. Davies, S.P., et al. 2000. Biochem. J. 351: 95-105. PMID: 10998351