Product Name: Y-27632 dihydrochloride
Catalog No.: 1254
Batch No.: 39

CAS Number: 129830-38-2
IUPAC Name: trans-4-[(1R)-1-Aminoethyl]-N-4-pyridinylcyclohexanecarboxamide dihydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C_{14}H_{21}N_{3}O\cdot 2\text{HCl}.\text{H}_{2}\text{O}
Batch Molecular Weight: 338.28
Physical Appearance: White solid
Solubility: phosphate buffered saline to 100 mM
water to 100 mM
Storage: Desiccate at RT

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC:
Shows 99.5% purity
Chiral HPLC:
Shows 99.8% purity
¹H NMR:
Consistent with structure
Mass Spectrum:
Consistent with structure
Optical Rotation:
[α]_D = +2 (Concentration = 1, Solvent = Methanol)
Microanalysis:
Carbon Hydrogen Nitrogen
Theoretical 49.71 7.45 12.42
Found 49.94 7.44 12.32

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
Y-27632 dihydrochloride

**Product Information**

**Product Name:** Y-27632 dihydrochloride

**CAS Number:** 129830-38-2

**IUPAC Name:** trans-4-[(1R)-1-Aminoethyl]-N-4-pyridinylcyclohexanecarboxamide dihydrochloride

**Description:**
Selective p160ROCK inhibitor (K values are 0.14, 26, 25 and > 250 μM for p160ROCK, PKC, PKA and MLCK respectively). Also inhibits PRK2 (IC50 = 600 nM). Smooth muscle relaxant and orally active in vivo. Increases survival rate of human embryonic stem (hES) cells and iPSC-BMECs undergoing cryopreservation. Also optimizes naïve human pluripotent stem cell growth and viability following naïve cell derivation from primed ESCs and iPSCs using naïve human stem cell medium (NHSM). Y-27632 synthesized to cGMP guidelines also available.

**Physical and Chemical Properties:**
- **Batch Molecular Formula:** C14H21N3O.2HCl.H2O
- **Batch Molecular Weight:** 338.28
- **Physical Appearance:** White solid
- **Minimum Purity:** >98%
- **Batch Molecular Structure:**

![Molecular Structure](image)

**Storage:** Desiccate at RT

**Solubility & Usage Info:**
- phosphate buffered saline to 100 mM
- water to 100 mM

When purchased as a 1mg unit, this product is supplied as a lyophilized solid and may be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

**Stability and Solubility Advice:**
Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath). Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:
- **SOLIDS:** Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.
- **SOLUTIONS:** We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

**References:**