

Y-27632 dihydrochloride

Catalog No: #S04961



Package Size: #S04961-1 1 mg #S04961-2 1 mL #S04961-3 10 mg #S04961-4 100 mg #S04961-5 2 mg #S04961-6 200 mg #S04961-7 25 mg #S04961-8 5 mg #S04961-9 50 mg #S04961-10 500 mg

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

Description

Product Name	Y-27632 dihydrochloride
Other Names	Rho-kinase;Rho-associated protein kinase;Rho-associated kinase;orally;pluripotent;ROCK;ROCK2;ROK;ROCK1 (p160ROCK);mesendodermal;lineage;hIPSCs;inhibit;modulation;Inhibitor;ATP-competitive;Apoptosis;active;epithelial-mesenchymal;cells;stem;transition-like;ε • εO• -4-[(R)-1-ζ ^o ε 1δH ε 1]-N-(4-ε • 'ε 'Aε 1)η —ε±η · η ρ ι °θ 1δ1 η · ι 'Eη · ;Y 27632;Y 27632 Dihydrochloride;Y 27632 dihydrochloride;Y27632;Y-27632;Y-27632 2HCl;Y27632 Dihydrochloride;Y27632 dihydrochloride;Y-27632 Dihydrochloride
Calculated MW	320.26
Storage	keep away from moisture,keep away from direct sunlight,store at low temperature . Powder: -20°C for 3 years . In solvent: -80°C for 1 year . Shipping with blue ice.

Application Details

ε • εO• :C14H21N3OBr·2HCl
 SMILES: Cl.C1.C[C@@H](N)[C@H]1CC[C@@H](CC1)C(=O)Nc1ccccc1DMLE• :MFCD03490488
 η1—ε1!;99.67%ζ1Aθ\$εε1!;H2O :32.03 mg/mL (100 mM);DMSO:50 mg/mL (156.12 mM)
 δ½ ε ζ'»ζ \$:ζ 'Hζ³ οO δ'E1η η@A Y-27632
 ε 'θΩ ε 'η η» ε η 'Yη η ζ'»η ζ½ ε οO ε° Y-27632 (2 or 30 mg/kg in drinking water) ε• εζ • η» ALS ζ''ε η SOD1G93A ε°• ιO οO ζ • η»- 137 ε ©γ
 η» ζ οO Y-27632 2 mg/kg ζ'»η η ζ ζ δ'E• δ½³οO Y-27632 30 mg/kg
 ζ'»η ε—ζ 'Hε ι ζ \$ε°• ιO η θΩ• ε 'ε θ ½οO ι ζ \$ε°• ιO δ» θ''η °ε 1ζ ι • η ζ 'Hε γ [4]
 ζ 'Hζ³ οO δ'E1η η@A Y-27632 ε—Hθ • η1 η»'ε η ε½±ε • οO ε° Y-27632 (30 mg/kg) ε• εζ • η» θ• —η» dimethylnitrosamine (DMN) θ—±ε—Oθ • η1 η»'ε η ε \$ιO οO ζ—• ε ©δE ζ-'οO ζ • η»-ε ε 'γ
 η» ζ οO Y-27632 ζ'»η ζ 'Yθ ε • ε° δ1 DMN
 θ—±ε—Oη θ • η1 η»'ε η ε• η οO ε'HAι • δ½ δ1 θ • θ • δE-θ Aε ε η'Y θ —ζ''ι 'Eη ε• «ι • δ» ε• α-SMA
 η θ''θ'Y'Yγ [5]δ½ ε ζ'»ζ \$:ζ 'Hζ³ οO δ11θ—±ε—Oε θ ½εH²η» θ marmoset iPSC η ''Y-27632 (5-20 εOM) ε η• 7 ε ©οO δ½Ωη '' AKP ζε ζ'' ε ι ε½ζ • ζ ε 'γ
 η» ζ οO Y-27632 ζ 'Yθ ζ•• ι« marmoset iPSC η ε ι ζ η γ [1]
 ζ 'Hζ³ οO ζ • δ11θ θ η» η» θ• η εH²η» θ ADSCs η ''Y-27632 (5 εOMoL/L) ε η• 1 hoO ζε ζ'' ADSCs η ε½ζ • ε• ε γ
 η» ζ οO Y-27632 ε ι • δ'Y• θ'' ζ \$θ—±ε—O ADSCs η η η»• ε ε ε οO 5 εOMoL/L Y-27632 ε η• 1 h η
 ADSCs η η η»• ε ζ'η» θ η 'Yε ζ— δ'E1οO 93.5±4.7οO %γ [2]
 ζ 'Hζ³ οO εθ θ 'Hη 'θ θ εH²η» θ cyES ε'Eεθ\$ δO δ»εζ η ''Y-27632 (1-10 εOM) ε η• 24 hoO δ½Ωη '' Flow Cytometry
 ζ 'Hζ³ θΩ θ' ζ'»-ζ'»ζ θ ροO δ½Ωη ''θ— ε η ζε ζ'' BrdUy
 η» ζ οO Y-27632 δΩ θΩ cyES ε- ζ'»η» θ ε' ε γ Y-27632
 ζ'»ζ δΩ θΩ η» θ ε' ζ οO δ½ δΩ• ζ η» θ ε 'ε• η» θ ζA ε ε• ε • δ1 η» θ ζ-»δ1'γ [3]η» θ ε ι :HeLa cells are plated at a density of 3F 10^4 cells per 3.5-cm dish. The cells are cultured in DMEM containing 10% FBS in the presence of 10 mM Thymidine for 16 h. After the cells are washed with DMEM containing 10% FBS, they are cultured for an additional 8 h, and then 40 ng/mL of Nocodazole is added. After 11.5 h of the

Nocodazole treatment, various concentrations of Y-27632 (0-300 μ M) or vehicle is added and the cells are incubated for another 30 min

[1].
A group of animals was injected with a single dose of pentylenetetrazole (PTZ, 65 mg/kg) to investigate if the two Rho-kinase inhibitors, fasudil, and Y-27632, changed the onset of PTZ seizures. Fasudil, Y-27632 or saline was given intraperitoneally 30 min before the PTZ injection. Each mouse was then observed for a 15-min period to measure the onset of the first myoclonic jerk, the onset of the first clonic convulsion and the occurrence of tonic hindlimb extension. Some of the animals died after tonic hindlimb extension, which is an expected outcome of acute PTZ injection. After the observation period, all animals were killed by halothane anesthesia [5]. Seven-week-old male Wistar rats were anesthetized with sodium pentobarbital. A silver clip (0.2 mm in diameter) was placed on the left renal artery in the preparation of the renal hypertensive rats. In the preparation of the DOCA-salt hypertensive rats, the left kidney was removed and a DOCA pellet (50 mg) was implanted subcutaneously. The DOCA rats were then fed an 8% salt diet. Rats from both groups were used after 8 weeks in the experiments, together with a male, 17 β 22-week old spontaneously hypertensive rats. The average systolic pressure in these groups of hypertensive rats ranged from 209 to 237 mm Hg, and no significant difference was found between groups. Eight-week-old male Wistar rats were used as controls. Their average systolic pressure was 139 mm Hg. Y-27632 was administered orally. The systolic blood pressure was measured by the tail cuff method at 1, 3, 5, 7 and 24 h. The rats were prewarmed to 40 \pm 0.5 $^{\circ}$ C for 10 min before each measurement. No toxicity was found in rats treated with 30 mg/kg of Y-27632 administered per os once per day for 10 days [4].
ROCK1 (p160ROCK): 140 nM (Ki, cell free) | ROCK2: 300 nM (Ki, cell free)
Apoptosis | ROCK

Note: This product is for in vitro research use only and is not intended for use in humans or animals.