



# Y-27632 2HCl

# Data Sheet

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<b>Catalog Number:</b>	MC11047	<b>Product Type:</b>	Small Molecule
<b>Bio-Activity:</b>	ROCK family kinase inhibitor	<b>CAS #:</b>	129830-38-2
<b>Research Categories:</b>	Stem cells, neuroscience, inflammation, ageing, diabetes, cancer	<b>Chemical Name:</b>	(R)-(+)-trans-4-(1-Aminoethyl)-N-(4-pyridyl)cyclohexanecarboxamide dihydrochloride
<b>Solubility:</b>	Soluble in DMSO up to 25 mg/ml) or in Methanol (up to 25 mg/ml).	<b>Molecular Formula:</b>	C14H21N3O · 2HCl
<b>Purity:</b>	> 98%	<b>Molecular Weight:</b>	320.26
<b>Format:</b>	Powder	<b>Ship Temp:</b>	Ambient
<b>Storage:</b>	-20°C		

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## Application Notes

### Description/Data:

Specific inhibitor of ROCK family kinases [1]. Enhances stem cell survival and proliferation in culture [2]. Significantly improves freeze/thaw survival rate for human embryonic stem cells without influencing morphology, karyotype, cell surface markers, or differentiation potential [3].

### References:

- 1) Ishizaki et al. (2000), Pharmacological Properties of Y-27632, a Specific Inhibitor of Rho-Associated Kinases; *Mol. Pharmacol.*, 57 976
- 2) Gauthaman et al. (2010), Effectis pf ROCK Inhibitor Y-27632 on Normal and Varient Human Embryonic Stem Cells (hESCs) In Vitro: It's Benefits in hESC Expansion; *Stem Cell Rev.*, 6 86
- 3) Li et al. (2008), the ROCK Inhibitor Y-27632 enhances the Survival Rate of Human Embryonic Stem Cells Following Cryopreservation; *Stem Cells Dev.*, 17 1079

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