



Catalog Number:	MC11047	Product Type:	Small Molecule
Bio-Activity:	ROCK family kinase inhibitor	CAS #:	129830-38-2
Research Categories:	Stem cells, neuroscience, inflammation, ageing, diabetes, cancer	Chemical Name:	(R)-(+)-trans-4-(1-Aminoethyl)-N-(4-pyridyl)cyclohexanecarboxamide dihydrochloride
Solubility:	Soluble in DMSO up to 25 mg/ml) or in Methanol (up to 25 mg/ml).	Molecular Formula:	C ₁₄ H ₂₁ N ₃ O · 2HCl
Purity:	> 98%	Molecular Weight:	320.26
Format:	Powder	Ship Temp:	Ambient
Storage:	-20°C		

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 Variet 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

FOR RESEARCH USE ONLY

NEUROMICS' REAGENTS ARE FOR IN VITRO AND CERTAIN NON-HUMAN IN VIVO EXPERIMENTAL USE ONLY AND NOT INTENDED FOR USE IN ANY HUMAN CLINICAL INVESTIGATION, DIAGNOSIS, PROGNOSIS, OR TREATMENT. THE ABOVE ANALYSES ARE MERELY TYPICAL GUIDES. THEY ARE NOT TO BE CONSTRUED AS BEING SPECIFICATIONS. ALL OF THE ABOVE INFORMATION IS, TO THE BEST OF OUR KNOWLEDGE, TRUE AND ACCURATE. HOWEVER, SINCE THE CONDITIONS OF USE ARE BEYOND OUR CONTROL, ALL RECOMMENDATIONS OR SUGGESTIONS ARE MADE WITHOUT GUARANTEE, EXPRESS OR IMPLIED, ON OUR PART. WE DISCLAIM ALL LIABILITY IN CONNECTION WITH THE USE OF THE INFORMATION CONTAINED HEREIN OR OTHERWISE, AND ALL SUCH RSKS ARE ASSUMED BY THE USER. WE FURTHER EXPRESSLY DISCLAIM ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.-V2/08/2012