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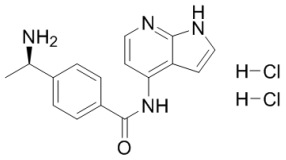
Datasheet (Version 1.0)

Product Name	:	Y-33075 dihydrochloride
Synonyms	:	——
Cat No.	:	M22457
CAS Number	:	173897-44-4
Molecular Formula	:	C16H18Cl2N4O
Formula Weight	:	353.25
Chemical Name	:	——
Description	:	Y-33075 dihydrochloride is a selective inhibitor of ROCK(IC50 of 3.6 nM).Y-33075 (Y-39983) is a potent inhibitor of ROCK(IC50 of 3.6 nM). Y-33075 also inhibits PKC and CaMKII more potently than Y-27632(IC50s of Y-27632 and Y-33075 for PKC are 9.0 μM and 0.42 μM, respectively), whereas the IC50s of Y-27632 and Y-33075 for CaMKII are 26 μM and 0.81 μM, respectively. The IC50s of Y-27632 and Y-33075 for PKC is 82 and 117 times those for ROCK, respectively, whereas the IC50s of Y-27632 and Y-33075 for CaMKII is 236 and 225 times those for ROCK, respectively. Y-33075 (Y-39983, 10 μM) extends neurites in the retinal ganglion cells (RGCs) compared with those in RGCs treated without Y-39983. Y-33075 (Y-39983, 1 μM) inhibits the contraction of rabbit ciliary artery segments evoked by histamine in Ca2+-free solutions[3].Y-39983 (≥0.01%) significantly lowers intraocular pressure (IOP) at 2 hours after topical administration in rabbits. Y-39983 (0.05%)-treated eyes show significant reduction of IOP between 2 and 7 hours after topical administration in monkeys. Y-39983 (100 μM) increases the regenerating axons of retinal ganglion cells (RGCs) in the eyes of the rats.
Pathway	:	Cell Cycle/DNA Damage
Target	:	ROCK
Receptor	:	ROCK;PKC;CaMKII
Solubility	:	DMSO:100 mg/mL (283.09 mM; Need ultrasonic);H2O:50 mg/mL (141.54 mM; Need ultrasonic)
SMILES	:	Cl.Cl.C[C@@H](N)c1ccc(cc1)C(=O)Nc1ccnc2[nH]ccc12
Storage	:	(-20℃)
Stability	:	≥ 2 years
Reference	:	



1. Hideki Tokushige, et al. Effects of Topical Administration of Y-39983, a Selective Rho-Associated Protein Kinase Inhibitor, on Ocular Tissues in Rabbits and Monkeys Invest. Ophthalmol. Vis. Sci. July 2007 vol. 48no. 7 3216-3222