

## **Data Sheet**

## **Product Information**

Catalog Number	BP14296
Product Name	Y-33075
Description	Y-33075 is a selective inhibitor of ROCK derived from Y-27632, and is more potent than Y-27632, with an IC50 of 3.6 nM.
Targets&IC50	PKC:420 nM, ROCK:3.6 nM, CaMKII:810 nM
In vitro	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 $\mu\text{M}$ and 0.42 $\mu\text{M}$ , respectively), whereas the IC50s of Y-27632 and Y-33075 for CaMKII are 26 $\mu\text{M}$ and 0.81 $\mu\text{M}$ , 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 $\mu\text{M}$ ) extends neurites in the retinal ganglion cells (RGCs) compared with those in RGCs treated without Y-39983. Y-33075 (Y-39983, 1 $\mu\text{M}$ ) inhibits the contraction of rabbit ciliary artery segments evoked by histamine in Ca2+-free solutions.
In vivo	Y-39983 ( $\geq$ 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 $\mu$ M) increases the regenerating axons of retinal ganglion cells (RGCs) in the eyes of the rats.
Synonyms	Y 39983
CAS No.	199433-58-4
Chemical Formula	C16H16N4O

Molecular Weight	280.331
Solubility	DMSO: 50 mg/mL (178.37 mM), Need ultrasonic and warming
Storage	Powder: -20°C for 2 years In solvent: -80°C for 1 year
Chemical Structure OR Tested Image	O H N H N H <sub>2</sub> N

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