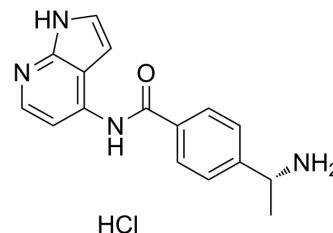


Y-33075 hydrochloride

Cat. No.:	HY-10068
CAS No.:	471843-75-1
Molecular Formula:	C ₁₆ H ₁₇ ClN ₄ O
Molecular Weight:	316.79
Target:	ROCK
Pathway:	Cell Cycle/DNA Damage; Cytoskeleton; Stem Cell/Wnt; TGF-beta/Smad
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Y-33075 hydrochloride (Y-39983) is a selective ROCK inhibitor derived from Y-27632, and is more potent than Y-27632, with an IC ₅₀ of 3.6 nM.
In Vitro	Y-33075 hydrochloride (Y-39983) (10 μM) extends neurites in the retinal ganglion cells (RGCs) compared with those in RGCs treated without Y-39983 ^[2] . Y-33075 hydrochloride (Y-39983, 1 μM) inhibits the contraction of rabbit ciliary artery segments evoked by histamine in Ca ²⁺ -free solutions. Y-33075 hydrochloride (10 μM) shows no effect on the [Ca ²⁺] _i increase with the high-potassium (high-K) solution ^[3] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Cell. 2018 Jul 26;174(3):636-648.e18.
- Science. 2017 Dec 1;358(6367):eaan4368.
- Nat Commun. 2020 Jan 3;11(1):88.
- Adv Sci (Weinh). 2022 Mar 3;e2104682.
- Stem Cell Rep. 2020 Jan 14;14(1):49-59.

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REFERENCES

- [1]. Tokushige H, et al. Effects of Y-39983, a selective Rho-associated protein kinase inhibitor, on blood flow in optic nerve head in rabbits and axonal regeneration of retinal ganglion cells in rats. *Curr Eye Res.* 2011 Oct;36(10):964-70.
- [2]. Watabe H, et al. Effects of Rho-associated protein kinase inhibitors Y-27632 and Y-39983 on isolated rabbit ciliary arteries. *Jpn J Ophthalmol.* 2011 Jul;55(4):411-7. *Epub* 2011 Jun 11.

Caution: Product has not been fully validated for medical applications. For research use only.

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