

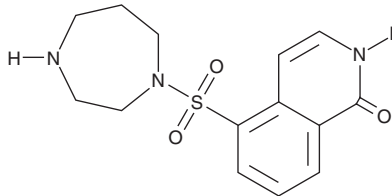
PRODUCT INFORMATION



Hydroxyfasudil

Item No. 40814

CAS Registry No.: 105628-72-6
Formal Name: 5-[(hexahydro-1H-1,4-diazepin-1-yl) sulfonyl]-1(2H)-isoquinolinone
MF: $C_{14}H_{17}N_3O_3S$
FW: 307.4
Purity: $\geq 98\%$
Supplied as: A solid
Storage: -20°C
Stability: ≥ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Hydroxyfasudil is supplied as a solid. A stock solution may be made by dissolving the hydroxyfasudil in the solvent of choice, which should be purged with an inert gas. Hydroxyfasudil is slightly soluble (0.1-1 mg/ml) in DMSO.

Description

Hydroxyfasudil is an inhibitor of ROCK1 and ROCK2 ($IC_{50}s = 0.15$ and $0.57 \mu\text{M}$, respectively) and an active metabolite of the Rho-associated kinase (ROCK) inhibitor HA-1077 (fasudil; Item No. 10010559).¹ *In vivo*, hydroxyfasudil (3 and 10 mg/kg) decreases blood viscosity and prevents cerebral vasospasm in a canine model of subarachnoid hemorrhage.² Hydroxyfasudil also reverses hypertension-associated dysfunction of relaxation induced by nitric oxide in corpus cavernosum smooth muscle in spontaneously hypertensive rats.³

References

1. Zaky, Y.A., Rashad, M.W., Zaater, M.A., *et al.* Discovery of dual rho-associated protein kinase 1 (ROCK1)/apoptosis signal-regulating kinase 1 (ASK1) inhibitors as a novel approach for non-alcoholic steatohepatitis (NASH) treatment. *BMC Chem.* **18(1)**, 2 (2024).
2. Satoh, S., Takayasu, M., Kawasaki, K., *et al.* Antivasospastic effects of hydroxyfasudil, a Rho-kinase inhibitor, after subarachnoid hemorrhage. *J. Pharmacol. Sci.* **118(1)**, 92-98 (2012).
3. Saito, M., Ohmasa, F., Dimitriadis, F., *et al.* Hydroxyfasudil ameliorates penile dysfunction in the male spontaneously hypertensive rat. *Pharmacol. Res.* **66(4)**, 325-331 (2012).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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