### Cat No. 61-F49

# HA-1077 (dihydrochloride)

## 10 mg



# For research purposes only

HA-1077 is a potent inhibitor of Rho-associated kinase II (ROCK-II), and also inhibits Protein Kinase C-related kinase 2 (PRK2), Mitogen- and Stress-Activated Protein Kinase (MSK1), and Mitogen Activated Protein Kinase-Activated Protein Kinase 1b (MAPKAP-K1b). HA-1077 is a novel vasodilator agent which inhibits vascular smooth muscle contraction by acting as an intracellular Ca<sup>2+</sup> antagonist. Through the inhibition of Rho-kinase, HA-1077 has been shown to reduce blood vessel constriction, decrease pulmonary arterial pressure, inhibit tumor angiogenesis, and improve insulin signaling in rodent models.

#### **TECHNICAL INFORMATION**



**Other Names**: hexahydro-1-(5-isoquinolinylsulfonyl)-1H-1,4-diazepine, dihydrochloride, Eril, Fasudil

Chemical Formula: C<sub>14</sub>H<sub>17</sub>N<sub>3</sub>O<sub>2</sub>S · 2HCl

**CAS Number:** 203911-27-7

Molecular Weight: 364.3

**Purity: >98%** 

**Appearance:** a crystalline solid

Solubility: DMSO

# **STORAGE AND HANDLING**

**Storage:** Store at 4°C and protected from light. Following reconstitution, store aliquots at -20°C.

Stability: Stock solutions stable at -20°C for up to 2 years.

Shipping Conditions: Shipped at room temperature.

### **PRODUCT USE**

Soluble in DMSO up to 10mg/ml. Soluble in water up to 200 mg/ml. If precipitate is observed, vortex for 5 minutes.

# REFERENCES

- 1. Yin et al. (2007) Fasudil inhibits vascular endothelial growth factor-induced angiogenesis in vitro and in vivo. Mol Cancer Ther. 6(5):1517-25.
- Shirotani et al. (1991) A new type of vasodilator, HA1077, an isoquinoline derivative, inhibits proliferation of bovine vascular smooth muscle cells in culture. J Pharmacol Exp Ther. 259(2):738-44.
- Nagumo et al. (2000) Rho kinase inhibitor HA-1077 prevents Rho-mediated myosin phosphatase inhibition in smooth muscle cells. Am J Physiol Cell Physiol. 278 (1):C57-85.

