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# **DATASHEET**

Fasudil hydrochloride

#### **Product overview**

Name Fasudil hydrochloride

Cat No HB0283

Alternative names HA 1077; 1-(5-Isoquinolinesulfonyl)homopiperazine, Monohydrochloride salt

**Biological action** Inhibitor Purity >98%

**Description** ROCK and cyclic nucleotide-dependent protein kinase inhibitor

## **Images**



### **Biological Data**

**Biological description** 

Rho-associated kinase inhibitor ( $IC_{50}=10.7~\mu M$ ) and cyclic nucleotide-dependent protein kinase inhibitor. Inhibits NOS in microglia and pro-inflammatory factors in brain tissue. Also reduces nitric oxide, IL-1 $\beta$ , IL-6 and TNF. Shows antioxidant effects which can reverse hypertension and neuroprotective actions.

# **Solubility & Handling**

Solubility overview Storage instructions Storage of solutions

**Shipping Conditions** 

**Important** 

Soluble in water (100mM) and in DMSO (75mM)

Room temperature

Prepare and use solutions on the same day if possible. Store solutions at -20 °C for up to one month if storage is required. Equilibrate to RT and ensure the solution is precipitate free before use.

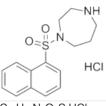
Stable for ambient temperature shipping. Follow storage instructions on receipt.

This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

## **Chemical Data**

Chemical name Molecular Weight Chemical structure  $5\hbox{-}(1,\!4\hbox{-}diaze pan-1\hbox{-}ylsul fonyl) is oquino line; hydrochloride$ 

327.83



**SMILES** C1CNCCN(C1)S(=O)(=O)C2=CC=CC3=C2C=CN=C3.Cl

InChi InChi=1S/C14H17N3O2S.CIH/c18-20(19,17-9-2-6-15-8-10-17)14-4-1-3-12-11-16-7-5-13(12)14;/h1,3

-5,7,11,15H,2,6,8-10H2;1H

InChiKey LFVPBERIVUNMGV-UHFFFAOYSA-N

MDL number MFCD00943198

#### References

Fasudil protects hippocampal neurons against hypoxia-reoxygenation injury by suppressing microglial inflammatory responses in mice.

Ding J *et al* (2010) J Neurochem 114(6) **PubMedID**20882700

Fasudil reversed MCT-induced and chronic hypoxia-induced pulmonary hypertension by attenuating oxidative stress and inhibiting the expression of Trx1 and HIF-1a.

Liu M *et al* (2014) Respir Physiol Neurobiol 201 **PubMedID** 24973470