

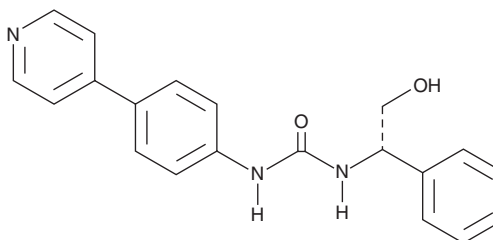
# PRODUCT INFORMATION



**AS-1892802**

Item No. 14978

**CAS Registry No.:** 928320-12-1  
**Formal Name:** N-[(1S)-2-hydroxy-1-phenylethyl]-  
N'-[4-(4-pyridinyl)phenyl]-urea  
**MF:** C<sub>20</sub>H<sub>19</sub>N<sub>3</sub>O<sub>2</sub>  
**FW:** 333.4  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 301 nm  
**Supplied as:** A crystalline 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

AS-1892802 is supplied as a crystalline solid. A stock solution may be made by dissolving the AS-1892802 in the solvent of choice, which should be purged with an inert gas. AS-1892802 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of AS-1892802 in these solvents is approximately 25 mg/ml.

AS-1892802 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, AS-1892802 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. AS-1892802 has a solubility of approximately 0.12 mg/ml in a 1:7 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

## Description

AS-1892802 is a potent inhibitor of Rho-associated serine-threonine protein kinases (ROCKs; IC<sub>50</sub>s = 122, 52, and 57 nM for human ROCK1, ROCK2, and rat ROCK2, respectively).<sup>1</sup> It is selective for ROCK1 and 2 over a panel of 167 kinases and a panel of 63 ion channels, receptors, and enzymes at a concentration of 10 μM. However, AS-1892802 inhibits protein kinase catalytic subunit (PKACα) and protein kinase X gene (PRKX) with IC<sub>50</sub> values of 200 and 325 nM, respectively. AS-1892802 reduces weight imbalance deficits (ED<sub>50</sub> = 0.15 mg/kg) in rats in a monoiodoacetate-induced model of non-inflammatory arthritis. It also has analgesic-like effects in a rat model of diabetic neuropathy induced by streptozotocin (Item No. 13104) and reduces cartilage damage and weight imbalance deficits in a rat model of osteoarthritis.<sup>2,3</sup>

## References

1. Yoshimi, E., Kumakura, F., Hatori, C., *et al.* Antinociceptive effects of AS1892802, a novel Rho kinase inhibitor, in rat models of inflammatory and noninflammatory arthritis. *J. Pharmacol. Exp. Ther.* **334**(3), 955-963 (2010).
2. Yoshimi, E., Yamamoto, H., Furuichi, Y., *et al.* Sustained analgesic effect of the Rho kinase inhibitor AS1892802 in rat models of chronic pain. *J. Pharmacobiodyn.* **114**(1), 119-122 (2010).
3. Takeshita, N., Yoshimi, E., Hatoria, C., *et al.* Alleviating effects of AS1892802, a Rho kinase inhibitor, on osteoarthritic disorders in rodents. *J. Pharmacol. Sci.* **115**(4), 481-489 (2011).

### 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.

### WARRANTY AND LIMITATION OF REMEDY

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## CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897  
[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM