

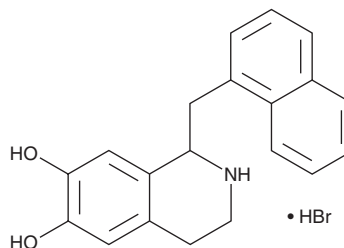
# PRODUCT INFORMATION



**YS-49**

Item No. 30970

**CAS Registry No.:** 132836-42-1  
**Formal Name:** 1,2,3,4-tetrahydro-1-(1-naphthalenylmethyl)-6,7-isoquinolinediol, monohydrobromide  
**MF:** C<sub>20</sub>H<sub>19</sub>NO<sub>2</sub> • HBr  
**FW:** 386.3  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 225 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

YS-49 is supplied as a crystalline solid. A stock solution may be made by dissolving the YS-49 in the solvent of choice, which should be purged with an inert gas. YS-49 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of YS-49 in these solvents is approximately 30 mg/ml.

YS-49 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, YS-49 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. YS-49 has a solubility of approximately 0.33 mg/ml in a 1:2 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

## Description

YS-49 is an inhibitor of platelet aggregation.<sup>1</sup> It inhibits ADP-, collagen-, or epinephrine-induced platelet aggregation in isolated human platelets (IC<sub>50</sub>s = 730, 92, and 3.4 μM, respectively). YS-49 also inhibits platelet aggregation and production of thromboxane A<sub>2</sub> (TXA<sub>2</sub>) induced by arachidonic acid (Item Nos. 90010 | 90010.1 | 10006607) in isolated rat platelets (IC<sub>50</sub>s = 3.3 and 32.8 μM, respectively).<sup>2</sup> It reduces LPS-induced contractions in isolated endothelium-denuded rat aortic strips in a concentration-dependent manner.<sup>3</sup> YS-49 (50 mg/kg) decreases thrombus weight in a rat model of arterio-venous shunt thrombosis.<sup>1</sup> It increases survival in a mouse model of septicemia induced by LPS when administered at doses of 10 and 20 mg/kg.<sup>3</sup>

## References

1. Yun-Choi, H.S., Pyo, M.K., Park, K.M., *et al.* Antithrombotic effects of YS-49 and YS-51--1-naphthylmethyl analogs of higenamine. *Thromb. Res.* **104**(4), 249-255 (2001).
2. Pyo, M.K., Kim, J.M., Jin, J.-L., *et al.* Effects of higenamine and its 1-naphthyl analogs, YS-49 and YS-51, on platelet TXA<sub>2</sub> synthesis and aggregation. *Thromb. Res.* **120**(1), 81-86 (2007).
3. Kang, Y.J., Koo, E.B., Lee, Y.S., *et al.* Prevention of the expression of inducible nitric oxide synthase by a novel positive inotropic agent, YS 49, in rat vascular smooth muscle and RAW 264.7 macrophages. *Br. J. Pharmacol.* **128**(2), 357-364 (1999).

### 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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